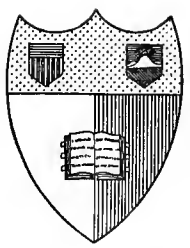
U. S. GEOGRAPHICAL SURVEYS.

LIEUT. GEO. M. WHEELER, CORPS OF ENGINEERS, IN CHARGE.

CATALOGUE OF MEAN DECLINATION OF 2018 STARS FOR JANUARY 1, 1875

T. H. SAFFORD, Ph. D.,



ENGINEER DEPARTMENT, UNITED STATES ARMY

CATALOGUE

OF THE

MEAN DECLINATION OF 2018 STARS

BETWEEN

0^h TO 2^h AND 12^h TO 24^h RIGHT ASCENSION,

AND

10° AND 70° OF NORTH DECLINATION,

FOR

JANUARY 1, 1875.

PREPARED UNDER THE DIRECTION OF

FIRST LIEUTENANT GEO. M. WHEELER,

CORPS OF ENGINEERS, U. S. ARMY,

IN CHARGE OF U. S. GEOGRAPHICAL SURVEYS WEST OF THE 100TH MERIDIAN,

BY

T. H. SAFFORD, Ph. D.,

FIELD MEMORIAL PROFESSOR OF ASTRONOMY IN WILLIAMS COLLEGE, MASS.

WASHINGTON:

GOVERNMENT PRINTING OFFICE

1879.

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LETTER OF TRANSMITTAL.

UNITED STATES ENGINEER OFFICE,
GEOGRAPHICAL SURVEYS WEST OF ONE HUNDREDTH MERIDIAN,
Washington, D. C., August 11, 1876.

GENERAL: I have the honor to submit herewith the tabulated manuscript of the mean declinations of 2,018 stars, for the year 1875, computed by Prof. T. H. Safford, and ranging in right ascension from 0 hour to 2 hours and from 12 hours to 24 hours, and in declination from 10° to 70° north.

This catalogue is susceptible of use during the months of the year best adapted to observations in the area west of the Mississippi River, and between latitudes 60° and 20° north. Exhausting, as it does, in a marked degree, all existing data upon the subject, it will be of practical use in latitude work for several years, not only upon this Survey, but such others as those of boundary-lines and in scientific works of like character that may be prosecuted in this region.

The necessity for the preparation of such a catalogue was discussed by Professor Safford and myself in the year 1873, when he was connected with the expedition; and the matter having been presented to the Chief of Engineers, authority for its complete preparation was granted October 27, 1874.

The distribution of stars into classes will prove of utility to the observer using the catalogue, and may possibly call attention to the desirability of further observation upon stars of the Class C, all of which need a redetermination.

Its early publication is earnestly recommended.

Very respectfully, your obedient servant,

GEO. M. WHEELER,
Lieutenant of Engineers.

Brig. Gen. A. A. HUMPHREYS,
Chief of Engineers, U. S. A., Washington, D. C.

OFFICE OF THE CHIEF OF ENGINEERS,
Washington, D. C., August 29, 1876.

Respectfully submitted to the honorable the Secretary of War, recommending that the Catalogue of Stars herein referred to be printed at the Government Printing-Office, and that two hundred and fifty copies be furnished on requisition from this office.

A. A. HUMPHREYS,
Brigadier-General and Chief of Engineers.

Approved:

By order of the Secretary of War.

H. T. CROSBY, *Chief Clerk.*

SEPTEMBER 3, 1876.

INTRODUCTION.

NEWTON, MASS., *August* 7, 1876.

Lieut. G. M. WHEELER, *United States Engineers:*

SIR: The following catalogue of 2,018 stars is submitted as the result of work done according to agreement between us. The main object has been to present a catalogue available for the operations of your office, and of other similar works; and I have spared no pains, as far as the time allowed, to gain valuable results.

A catalogue of the mean declinations (with accompanying approximate right ascensions) of 981 stars, between 30° and 60° of north declination, was computed by myself for the use of the United States Lake Survey, under the direction of Maj. and Bvt. Brig. Gen. C. B. Comstock, and published by the War Department in 1873. This has done good service in latitude work, but the limits of declination were found too narrow for the operations of your office in more southern latitudes. I have, therefore, computed similar positions for 1,037 new stars, mostly in the zone of north declination from 10° to 30° and 60° to 70°, so that the present catalogue includes all stars fit for our present purpose between 10° and 70° of declination in the right ascensions (0^h to 2^h and 12^h to 24^h) oftenest used for latitude work.

A revision of the previous catalogue by the introduction of many observations first published since its computation, and of a few not then within my reach, has been incorporated with the present one. It soon became manifest that the new region now included contains a larger proportion of well-determined stars, owing, I fancy, to the inconvenience of observing near the zenith with the usual fixed instruments.

I have found it necessary, however, to classify the stars according to the degree of accuracy with which their proper motions have been determined. All the declinations, with few exceptions, enjoy a high degree of precision for dates about 1850, which is the average epoch of the best modern observations; but many of them have not been well observed by the older astronomers, Bradley, Piazzi, Lalande, and Groombridge, so that their proper motions are not yet so certain as they ought to be for the attainment of the last degree of accuracy at the present epoch. Such of these stars, about 600 in number, as have not been lately observed, have been placed apart by themselves, in Class C, for a double reason:*

First, that the observers at fixed observatories may see at a glance what stars especially need redetermination in both elements; *one* thorough determination, consisting of three, or better four, observations, will be sufficient in most cases to remove the uncertainty and transfer the star in question to the next higher class, B.

Second, that the latitude-observers may use these stars only in case of absolute necessity.

The remaining stars are still divided into three classes:

AA, those whose positions rest upon a great multitude of recent observations; these stars are chiefly those employed as zero-stars in the various ephemerides.

A, those whose places have been well settled by at least three observations at each of two observatories, or by a great number of observations at one, since 1860 (or since 1855, when the older determinations give the proper motion with great certainty).

* The stars of Class C were finally incorporated with the rest of the catalogue for greater convenience in its practical use.

B, those whose places have been but once so fixed since the same dates.

The best estimate which I can make of the probable error of the declination, for 1875, of an average star in each of these four classes, is:

Class AA $\pm$ 0″.18
Class A $\pm$ 0″.28
Class B $\pm$ 0″.43
Class C $\pm$ 0″.7

I have here been careful to allow a sufficient amount for the uncertainty of proper motion; the theoretical value would have been somewhat less, but I have not thought it safe to consider the probable error of annual proper motion as less than 0″.01 in any case. The greatest difficulty, of course, was found in assigning a probable error to stars of the Class C. The value given was derived from 40 stars of the catalogue of 981 stars, which were of that class when that work was published, but have now been rated higher, in consequence of getting new material. They give a probable error

(Lake Survey Catalogue—newer observations) = $\pm$ 0″.67

for the mean epoch, 1869. This includes the probable error of about four newer observations in each case, which is enough to balance the uncertainty of proper motion from 1869 to 1875.

The re-observation of a sufficient number of the present stars of this class, to give a more accurate determination of this probable error, has been requested, through your office and that of the Chief Engineer, U. S. A., of Admiral Davis, Superintendent of the United States Naval Observatory; the observations are nearly completed at the Observatory, but not yet reduced.

The present catalogue contains, as before stated, a revision of all the 981 stars of the Lake Survey Catalogue above referred to. Since that was published, great activity has been manifested in making and publishing excellent observations of those stars. I may especially notice—

1. Professor Auwers's re-reduction of Bradley; the declinations of this were kindly furnished at your request, and have been of the greatest service.

2. The current Greenwich, Washington, and Oxford volumes, including for each a year's results in advance of publication, furnished me by the kindness of Sir George Airy, Admiral Davis, and the Rev. Robert Main respectively. (Since writing this, these volumes have been published, and it appears that the MS. Washington results were not quite complete. They did not include the stars observed once or twice during that year, nor Professor Yarnall's observations. When the volume was published, I noted some of its results in the column of remarks.)

3. Professor Yarnall's admirable catalogue, which contains the results of many years' observations at Washington.

4. Volume 6 of the Observations de Poulkova. These admirable determinations came very late, so that I could not use them throughout, but have employed them to determine a great many difficult cases.

5. In addition to the work recently published, I have employed a good deal of time in searching for isolated determinations of declination—especially in connection with latitude work—scattered in various places. Some declinations by Gauss, Argelander (in one case overlooked by himself when discussing the star many years after), Struve, Bessel, and by other more recent astronomers, have been thus discovered, and have proved to be of the highest precision.

The catalogues used with their epochs are the following:

1755. Bessel's and Auwers's Bradley. (Br.) Auwers's *declinations* are used. I have rarely needed to consult Bradley in right ascension, as Mädler's proper motions are in general good enough for our purposes.

1756. Mayer (M.). Not often used.
1790. Fedorenko's Lalande. (F.)
1800. Gould's D'Agelet. (D'A.) Not much used.
Baily's Lalande. (Ll.)
Piazzi. (Pi.)
1810. Groombridge. (Gr.)
1820. Bessel. (B.) } A few fundamental places.
Gauss. }
1827. Gauss. Latitude stars from his paper on the latitudes of Göttingen and Altona.
1829. The latitude stars used in Struve's Breitengradmessung.
1830. Argelander Åbo Catalogue. (CA.)
Struve's Positiones Mediæ. (P. M.)
Pond's Catalogue of 1112 Stars. (Pd.)
1835. Taylor's Madras General Catalogue. (T.)
1836. Rümker's Catalogue. (Rü.)
1837–1844. Henderson's Observations. (H.) Separate years; especially 1844.
1840. The Greenwich Twelve-Year Catalogue, first part. (Ay. 12 yr.)
The Armagh Places of Stars. (Arm.)
1841–1855. The Pulcova Observations (Vol. VI); reduced to separate years. (Pulc.)
1845. The Greenwich Twelve-Year Catalogue, second part. (Ay. 12 yr.)
The Radcliffe Catalogue. (RC.)
The Pulcova Fundamental Catalogue (Observations, Vols. III, V), with a few scattered observation of other stars. (Pulc.)
1849. Oudemans's Dissertatio Astronomica Inauguralis. (Ou.)
1850. The Greenwich Six-Year Catalogue. (Ay. 6 yr.)
Jacob's Madras Catalogue. (Ja.)
1857, 1859, 1861, 1864. The Königsberg Observations. (Kbg.)
1857–1867. The Brussels Observations. (Q.)
1860. The Greenwich Seven-Year Catalogue. (Ay. 60.)
The Second Radcliffe Catalogue. (RC_2.)
Prof. Yarnall's Washington Catalogue. (Yarn.)
1862. Oöm's Declinations from Prime Vertical Observations made at Pulcova. (Oöm.)
1862–1872. Main's Radcliffe Observations. (Main.)
1863, 1864. The Paris Observations of Latitude Stars. (LeV. 63; LeV. 64.)
1864. The Greenwich Seven-Year Catalogue for 1864. (Ay. 64.)
1868–1873. The Greenwich Annual Volumes. (Ay. 68—Ay. 73.)
1870–1873. The Washington Observations, from 1866 to 1873 inclusive. (Wn. with year.)
1875. The Pulcova Observations of Auxiliary Fundamental Stars (Pulc.), published in the Vierteljahrsschrift der Astronomischen Gesellschaft.

There are various other star-places used, generally mentioned in the notes.

It is, of course, to be understood that many observations are made several years from their epoch. Gould's D'Agelet is derived from observations from 1783 to 1785; Struve's Positiones Mediæ, from observations up to 1843, inclusive; Rümker's catalogue, from observations up to 1847, at least; Professor Yarnall's and

the Armagh catalogues give positions often referred to an equinox more than ten years from their date. The systematic corrections to a common standard, which I have used in declinations only, are a combination of various materials, and not altogether homogeneous. In general, they agree with Professor Auwers's system up to 30° of north declination; from 30° to 60°, they are more nearly in accordance with Airy's catalogue for 1864; and from 60° to 70° are about a mean between those necessary to reduce to the two Greenwich seven-year catalogues of 1860 and 1864. Bessel's precessions have been used; for proper motion I have employed Mädler's values (or an approximation of my own) in right ascension, which is given only provisionally, and in declination have determined the value adopted by comparison of modern observations with ancient. For Bradley's stars I have thought it sufficient, in most cases, to use Professor Auwers's corrected values of declination mentioned above; only when the star was little observed by Bradley I have added Piazzi, Groombridge, or more recent determinations. In reducing Bradley's stars, I have generally employed Mädler's values (sometimes omitting his proper motion) of precession and secular variation, which, for my purpose, are accurate enough. His secular variations are mostly computed for 1802.5 (as it seems) by comparison of Bessel's precessions of 1755 with Mädler's own for 1850. The precession constants are as follows:

	Bessel.				Struve—Peters.		
	m	$\frac{m}{15}$	n	Log. n	m	n	Log. n
	″	s.	″		″	″	
1750	46. 0282	3. 06855	20. 0644	1. 302427	46. 0481	20. 0650	1. 302439
60	. 0313	. 06876	. 0634	406	. 0509	. 0642	421
70	. 0344	. 06896	. 0625	385	. 0538	. 0633	402
80	. 0375	. 06917	. 0615	364	. 0566	. 0624	383
90	. 0406	. 06937	. 0605	343	. 0595	. 0616	365
1800	. 0437	. 06958	. 0596	322	. 0623	. 0607	346
10	. 0468	. 06978	. 0586	301	. 0651	. 0598	327
20	. 0498	. 06999	. 0576	280	. 0680	. 0590	309
30	. 0529	. 07020	. 0567	259	. 0708	. 0581	290
40	. 0560	. 07040	. 0557	238	. 0737	. 0572	271
50	. 0591	. 07061	. 0547	217	. 0765	. 0564	253
60	. 0622	. 07081	. 0537	196	. 0794	. 0555	234
70	. 0653	. 07102	. 0528	175	. 0822	. 0547	215
80	. 0684	. 07122	. 0518	154	. 0851	. 0538	197
90	. 0715	. 07143	. 0508	133	. 0879	. 0529	178
1900	46. 0745	3. 07164	20. 0499	1. 302112	46. 0908	20. 0521	1. 302159

The formulæ for secular variation are, as given by Menten:

$$100\,\frac{d^2\alpha}{dt^2} = A + B\tan\delta + C\tan\delta^2$$

$$100\,\frac{d^2\delta}{dt^2} = A' + B'\tan\delta$$

in which, employing Bessel's constants for 1860,

$$A = 0^s.00206 + 0^s.00650\sin 2\alpha = 0^s.00206 + \tfrac{1}{2}C$$
$$B = [8.4750]\cos\alpha + [6.811\,n]\sin\alpha$$
$$C = [8.1139]\sin 2\alpha$$
$$A' = -0''.0097\cos\alpha - 0''.4479\sin\alpha$$
$$B' = [9.2900\,n]\sin\alpha^2$$

For non-Bradley stars I have generally, for the zones here first computed (10° to 30° and 60° to 70°) compared all the thoroughly good observations, omitting the older zones where better material was at hand and they could be spared. Generally I employed a very close approximation to the method of least squares chiefly by forming normals, unless a single good old authority were at hand, when it was sometimes thought sufficient to compare it with the mean by the weights of the good modern determinations. If, for instance, I had only Groombridge, 1810, and three or four determinations (H., RC., Ja., Pulc.,) about 1845, the mean of these last was at once taken to compare with Groombridge.

Where this process gave a certain proper motion, I should not hesitate to use it, but at the same time place the star, if not more recently observed, in Class C; in many cases the value of proper motion was so small and doubtful that I thought it safest to give the mean of the modern authorities brought up without proper motion as the position for 1875. This is especially true in cases where the star is among those discussed in 1873. But, in these cases, a re-observation should precede the final revision, as the question of proper motion or no proper motion would thus be at once settled.

For simplicity's sake, I have often given the proper motions in declination to two places of decimals only, save where the star was a well-determined one of Bradley's. But in all cases the annual precession in declination was computed to three decimals at least.

No use was made (save in a few cases) of Mädler's declination in taking the means. His value is given as a check on the proper motion. Where it seemed best, the separate observations from which he calculated it have been used; but in the great majority of cases there were so much newer and better ones at hand that this was needless.

The right ascensions throughout are provisional, but will serve a good purpose where they are derived from numerous late observations. For the stars given in my previous catalogue, I have not here presented the details; for which reference may be made to that catalogue, and the notes to this one.

Field-observers will mostly use the catalogue of 539 stars, published at Berlin, in their longitude work; for many of the stars there given there are right ascensions in this volume which include newer observations, and are, I think, better. I am now publishing an extensive series of right ascensions, observed by myself and others at Cambridge, about 1864; and Mr. Rogers is also printing his later results, so that I shall recur to this subject elsewhere.

For telegraphic longitude work the present volume supplies sufficiently accurate values, if care be taken to omit ill-determined stars. Those classed as AA or A in declination will be found good enough in right ascension.

In combining the positions, I have generally employed Argelander's rule, giving to a modern determination from—

1 observation, a weight $\frac{1}{2}$;

2 observations, a weight $\frac{3}{4}$;

3 to 8 observations, a weight 1;

9 or more observations, a weight $1\frac{1}{2}$ or 2.

The determinations, brought up to 1875, as given in the details of positions, to which no figure is subscribed, and to which there is no note, have, according to this rule, been entitled to the unit of weight.

Argelander generally gives Piazzi a weight = 1; the value *one-half* is much nearer the truth; in general, he assigns rather a larger relative weight to the older and poorer observations than they deserve. But this is mostly compensated by the number of determinations. Had I received the Pulcova observations, from 1840

to 1855, earlier, I should have given them double weight throughout, and have employed their right ascensions. Since completing the present volume I have made other studies into the weights to be assigned.

The revision of the present catalogue by new observations need only be made for the class C. *All* the stars are included in the great zones now in progress; and there are also unreduced and unpublished observations expected from the observatories at Moscow, Pulcova, Armagh, Glasgow, and Madrid, as well as current work at Greenwich, Paris, Oxford, and Washington, which will go far toward filling any other lacunæ.

I have been convinced, by the present discussion, that the ordinary meridian work of observatories needs to be modified, if the accumulation of raw material undiscussed, and rendering discussion more and more difficult, is not to go on for an indefinite future. The subjects of stellar meridian observation in the northern hemisphere of the heavens now needing attention are these:

1. More thoroughly good fundamental determinations.

2. The observation (aside from the zones) of those of Heis's stars (Atlas Cœlestis Novus) which are not in the B. A. C., about 2,000 in number; these stars are as much needed as those in the B. A. C.

3. The revision of doubtful cases, such as those in Class C of the present work; in future, of stars which may become relatively doubtful from time to time.

4. The regular observation every few years of stars of decided proper motion.

Any other stellar observations need be only for special practical purposes.

In order to exhibit the general form of the discussion I will give here a few stars in detail:

B. A. C. 4826 (from the Lake Survey Catalogue) is a star of considerable proper motion, and was rediscussed in the fullest manner. The original authorities are:

Authority.	Equinox.	Epoch.	No. obs.	AR.	Decl.
				h. *m.* *s.*	° ′ ″
F	1790		1	14 26 37.89	53 49 21.0
Pi	1800		7.8[1]	26 57.067	46 39.0
Gauss	1827	1827.4	1.22[2]	27 50.42	39 33.02
Hansen	1827	1827.4	0.9[3]		39 33.40
C. A.	1830	1830.	8	27 56.37	38 47.7
T	1835		3.4	28 6.40	37 25.60
Rii	1841	1841.	3[4]	28 17.750	35 53.12
RC	1845	1849.7	3	28 25.64	
		1845.	3[5]		34 49.8
Arm	1840	1850.2	5		36 11.80
		1853.4	2	28 15.46	
RC_2	1860	1856.9	4		30 53.9
		1858.1	3	28 54.91	
Q	1860	1860.38	2	28 55.15	30 54.1
Yarn	1860	1862.4	2	28 55.06	30 54.4

[1] 7 observations in AR; 8 in declination. [2] Observations in declination made with Ramsden's zenith-sector. [3] Zenith distances at Gotha, page 77 of Gauss's dissertation "Bestimmung des Breitenunterschiedes" combined with the latitude of Gotha and flexure from the same dissertation. [4] Page 143 of the catalogue. [5] Reduced with P. M. + 0″.30.

For AR. I shall use at first the precession and proper motion of the Åbo catalogue, namely:

Prec. for 1830	$+1^s.9772$
P. M. for 1830	$-0^s.021$
Sec. variation	$-0^s.0009$
A. variation 1830	$+1^s.9562$

With this, I get for 1875.0.

	Prec. + P. M.	Red. to Epoch.		S. C.	Reduced with S. C.
	m. *s.*			*s.*	
F	+2 46.28		14 29 24.17	+0.026	24.20
Pi	+2 26.71		(23.78)	+0.336	(24.12)
Gauss	+1 33.89		24.31	+0.042	24.35
C. A	+1 28.02		24.39	+0.038	24.43
T	+1 18.24		(24.64)	+0.065	24.70
Rü	+1 6.50		24.25	+0.017	24.27
RC	+ 58.67	+0.10	24.41	+0.014	24.42
Arm	+1 8.46	+0.28	24.20	+0.045	24.24
RC_2	+ 29.34	−0.04	24.21	−0.08?	24.13
Q	+ 29.34	+0.01	24.50	+0.076	24.58
Yarn	+ 29.34	+0.05	24.45	+0.028	24.48

There seems to be no reason to change the proper motion of the Åbo catalogue, as the mean of the observations since 1840, with systematic correction, allowing Arm., Q., and Yarn. a weight $\frac{3}{4}$ each, is $24^s.34$ for about 1853.5; while C. A. for 1830 gives $24^s.43$; Gauss, 1827, $24^s.35$; Fedorenko, 1790, $24^s.20$, and Pi. $24^s.12$, without allowing for the difference between his date of observation and 1800; so that it is not seen whether the P. M. is to be increased or diminished. The three latest authorities, with proper weights 1, $\frac{3}{4}$, $\frac{3}{4}$, give $24^s.37$. The value given in the Lake Survey Catalogue (without systematic correction) is $24^s.31$, and proper motion $-0^s.019$, not including the authorities C. A., Q., and Yarn., which were not accessible to me in compiling it.

[The process which I have commonly employed, of assigning a proper motion in right ascension, is a more summary one. Systematic corrections were only used when very certain and important, as in case of Piazzi.]

For declinations I employ—

Precession for 1875:	Star Tables of the American Ephemeris	$-15''.9434$
	Correction for 1875	+ 33
	Precession for 1875	$-15''.9401$
Secular variation for 1830 (Åbo catalogue)		+ $0''.180$

The precession is verified in this case by subtracting 0.45 of the secular variation, reducing it to 1830, which gives $-16''.021$, agreeing with Argelander.

Reduction of declinations.

		Precession.	Systematic corrrection.	1875.0.	Ep.	Wt.
F.....	85 × prec. for 1832.5 = 85 × −16″.0165	−22′ 41″.4	0″.0	53° 26′ 39″.6	(1790)	¼
Pi	75 × −16.0075	20 0.56	+0.37	38.8	(1800)	1
Gauss .	48 × −15.9833	12 47.20	+0.5	46.3	1827.4	2
Hansen	Ditto	... .	+0.5	46.7	27.4	1½
C. A ..	45 × 15.9806	11 59.13	+0.02	48.6	30	1½
T	40 × 15.9761	10 39.04	+0.59	47.2	35	1
Rü .	34 × 15.9707	9 3.00	−0.69	49.4	41	1
RC...	30 × 15.9671	7 59.01	+0.27	51.1	45	1
Arm .	35 × 15.9716	9 19.01	−0.53	52.3	50.2	1
RC_2...	15 × 15.9536	3 59.30	+0.05	54.6	58.1	1
Q - -	Ditto	....	0.0	54.8	60.4	¾
Yarn ..	Ditto	....	0.0	55.1	62.4	¾

Combining neighboring observations into normals, we have the seconds of declination:

1798	38″.96	Wt. 1¼
1828.2	47 .11	5
1842.8	50 .00	4
1860.1	54 .81	2½

Hence for 1836.07 the most probable declination is 48″.73, and the proper motion for

38.07 years =	9″.77
7.87	1 .62
6.73	1 .27
24.03	6 .08

For one year—

0″.257	Wt. 1¼ $(38.07)^2$ = 1811
0 .206	5 (7.87)² = 310
0 .189	4 (6.73)² = 181
0 .253	2½ $(24.03)^2$ = 1444

Or, combined, and omitting the third decimal, 0″.25 yearly. The final result for 1875 will then be

53° 26′ 58″.46.

The separate observations brought up with the P. M. 0″.25 are

		c.— o.
F..... ..	53° 27′ 0″.8	−2″.3
Pi	26 57 .6	+0 .9
Gauss ..	58 .2	+0 .3
Hansen ..	58 .6	−0 .1
C. A ..	59 .8	−1 .3
T... ...	57 .2	+1 .3
Rü .	57 .9	+0 .6
RC.....	58 .6	−0 .1
Arm	58 .5	0 .0
RC_2.....	58 .8	−0 .3
Q .. .	58 .5	0 .0
Yarn	58 .3	+0 .2

The probable error of weight = 1 is therefore

$$\pm\, 0''.57 \text{ by sums of squares}$$
$$\pm\, 0\ .51 \text{ by sums of errors}$$

As the proper motion is so considerable, I examined Piazzi's Storia Celeste to find the epochs of his observations, but found that six of them were made in May, 1796, and the remaining two in May, 1810. The correction for proper motion to 1800 is, then, very trifling. In like manner, I found that Taylor had observed the star either in 1834 or 1835. The remaining C − O (− 1″.3) for Argelander's Åbo catalogue is very remarkable, as the positions of that catalogue are so exact that, in general, they deserve a double weight.

The star B. A. C. 5271 (χ Herculis) is a Bradley star of considerable proper motion, once only observed by Bradley in declination. The reduction to 1875 (in declination) was first effected by Mädler's values of precession, proper motion, and secular variations, as follows:

1850: Precession + proper motion (in declination)	= − 10″.351
Secular variation	+ 0 .256
Proper motion	+ 0 .610

The late declinations used, as brought up to 1875.0, are

RC.	42° 48′ 9″.04	S. C. − 0″.15	Result 8″.9	Weight 1
Pulc.	7 .96	+ 0 .9	8 .9	1
Arm.	11 .69$_2$	− 0 .9	10 .8$_2$	$\frac{3}{4}$
Yarn	6 .56	0 .0	6 .6	1
Ay. 60.	7 .73	+ 0 .2	7 .9	1
RC$_2$.	8 .41$_1$	− 0 .16	8 .2$_1$	$\frac{1}{2}$
Main 72	7 .79		7 .8$_2$	$\frac{3}{4}$

By Ay. 60 is meant the seven-year catalogue for 1860; by Main 72, in this case, the Radcliffe observations for that year. In many cases the observations of several years are combined into one date.

The Armagh plan and Main 72 depend on two observations each; that noted RC$_2$. on one only. Assigning the weights given above, we have the mean value for 1875.0, 42° 48′ 8″.4, depending on Mädler's proper motion.

Professor Auwers's reduction of Bradley, brought up to 1875, without proper motion, gives 42° 46′ 54″.6 from one observation; it holds good for the epoch 1754.5. The difference, 42° 48′ 8″.4 − 42° 46′ 54″.6, divided by 1875 − 1754.5, or 120.5 years, gives $\frac{73''.8}{120.5}$, or 0″.612 for the annual proper motion. It is manifestly unnecessary to correct Mädler because of the new reduction of Bradley; but we must see whether the intermediate observations are represented.

With the proper motion + 0″.610, Groombridge gives 42° 48′ 9″.2, and the Åbo catalogue 42° 48′ 7″.6; the systematic corrections + 0″.4 and − 0″.3 bring the results to 9″.6 and 7″.3, agreeing to − 1″.2 and +1″.1 with the adopted value; there seems to be no need of change in the proper motion.

The modern observations used give the probable error to weight 1 = ± 0″.79 by sums of errors, ± 0.81 by sums of squares; hence, the probable error for about 1855 = ± 0″.33, and assuming the P. E. of the yearly proper motion as 0″.01 for 1875, ± 0″.39, unless we use the mean value ± 0″.50 for the probable error of one determination, which would give ± 0″.29 for 1875. The star is placed in Class B, especially on account of the unusual discrepancy of the results. Fortunately, the omission of the larger discrepancies, Arm. − 2″.4 and Yarn. + 1″.8, will leave the final result unchanged.

If the proper motion given by Mädler had been changed, the variation would need to be *increased* in consequence of the error caused by using the uncorrected value to reduce to 1875.

The star B. A. C. 6867 = Piazzi XIX, 371 was observed also by Groombridge (2996). The precessions in declination as computed by Taylor's AR. for 1835, and that of the Lake Survey Catalogue for 1875, are—

Prec. 1835 + 9″.4750

Prec. 1875 + 9″.5325

These are approximately verified by the Radcliffe precession and secular variation (+ 9″.49 and + 0″.15) for 1845; and the precession for 1837.5 is interpolated as 9″.4786, giving the total motion from 1800 to 1875 11′ 50″.89, which, added to Piazzi's declination for 1800.0, 58° 30′ 55″.2, gives, for 1875.0, 58° 30′ 46″.09, or, with systematic correction + 0″.69, 58° 18′ 46″.78.

Groombridge's declination, as reduced to 1845, in the Radcliffe Catalogue, is 58° 25′ 59″.7; 30 times the interpolated precession for 1860 (+ 9″.5109) is 4′ 45″.33; and the systematic correction for Groombridge + 1″.05; Groombridge's declination for 1875, with systematic correction, is then 58° 30′ 46″.08 for the epoch 1810.2. Giving Pi. and Gr. equal weights, we have, for about 1805, 58° 30′ 46″.13, reduced by precession only to 1875. The more modern authorities, with systematic corrections, are (see Lake Survey Catalogue):

	S. C.	Lake Survey Catalogue.	With S. C.	
	″	° ′ ″	″	
T	+ 0.7	58 30 44.4	45.1	
Ay. 45 ..	+ 0.1	46.6	46.7	(Including Ay. 40.) (Double weight.)
H	0.0	45.6	45.6	
RC	+ 0.8	45.5	46.3	
Arm	− 0.1	46.9	46.8	
Mean			46.2	

The proper motion is thus seen to be very small; the mean of the modern authorities differs only 0″.23 from that of the two ancient ones. It will be safer to assume no proper motion, and 58° 30′ 46″.2 for the declination for 1875.0; but the star is classed as C, the latest authority being about 1844.

There is, however, a slightly later determination (Pulcova, 1846 and 1847), and a scattered observation or so at Brussels, which agree well enough. From the data here given, the probable error of one determination is about ± 0″.50, and that of the declination for 1875 about ± 0″.57, strictly referring, however, to the value 58° 30′ 46″.0, which would be obtained by calculating the proper motion.

Pulcova gives for 1846.0:	58° 26′ 9″.66	Reduced to 1845:	0″.17
	9 .50		0 .01
	8 .17		25′ 58 .68
1847.0:	18 .83		59 .85
	19 .63		26 0 .65
			58° 25′ 59″.87
		Precession, 1845–1875,	4 45 .33
		Systematic correction,	+ 0 .90
			58° 30′ 46″.10

The star needs but a good determination by three or four observations to be placed at once in Class B, and its position can be now used without much hesitation; but there is some uncertainty in its reduction

to 1875 for a space of nearly thirty years in the most favorable case. It is finally placed in Class C, to indicate the need of newer observations rather than on account of its absolute uncertainty. The stars classed C are of very various degrees of accuracy, and therefore less proper to use in any case, as their probable errors are often hard to estimate. Such of them, for instance, as have been determined with precision only by Groombridge, and in the Radcliffe Catalogue, or even with the addition of Jacob, are sometimes quite uncertain. With stars of this class I have been (as before mentioned) necessarily pretty free to assume a proper motion equal to zero, as this, in such cases, often gives better results than to determine it by least squares, which often gives quite illusory values in so ill-conditioned work. The true course is to re-observe the stars, as before suggested. This, if *thoroughly well* done, at once utilizes all the older observations, and shows whether the slight indications of proper motion are due to errors of observation or no. For another case in point, we may take B. A. C. 6311 = Gr. 2584. The observations, as reduced to 1875, are (see Lake Survey Catalogue):

Gr.	59° 37′	38″.05	S. C. + 0″.97
RC.		40 .5	+ 0 .8
Arm.		38 .4	0 .0
Ja.		38 .5	+ 0 .6

We might be tempted to think that there is a P.M. of perhaps + 0″.02; but, with the systematic corrections, the mean of the three modern determinations is 59° 37′ 39″.6, and Washington, 1872, with its systematic correction of —0″.2, gives 59° 37′ 39″.3, or the proper motion above indicated is not confirmed even as to direction. Assuming no proper motion, the mean of the four more recent determinations is 39″.5; the tenth of a second would be altered to 39″.4 if Groombridge were included, which was done for the purpose of calculating the probable error of one declination. This was about ± 0″.74; usually it has been found about ± 0″.50. The star is classed B.

The details of the revision of the Lake Survey Catalogue differ from those given in that work, as follows:

In this book, proper motion is included where given in the final catalogue; in that, only where the star is determined by Mädler. Moreover, systematic corrections were there used only in part, but are here employed, *and have been applied* in the details, which was not so before. The systematic corrections employed were mostly derived from Professor Auwers's paper in A. N. with the addition, for the epoch 1860, of the following values:

	Decl.
10° to 40°	0″.00
50	+ 0 .15
60	+ 0 .30
70	+ 0 .26

These values were diminished in proportion to the length of time since 1755; were multiplied by

$$\frac{t - 1755}{105}$$

For the authorities of 1860 and later, the following values were used, though not very consistently in some cases, approximations having been at first employed:

		1860	1864	1868–73
	° °	″	″	″
Airy	10 to 30	+ 0.4	+ 0.2	— 0.2
	30 to 40	+ 0.3	+ 0.1	— 0.25
	40 to 60	+ 0.2	0.0	— 0.25
	60 to 70	+ 0.2	— 0.1	— 0.3

For Main, I had some trouble in assigning true corrections.

I used for 1862 to 1867:

$-0''.84$ for 10°
$-0\ .63$ for 20
$-0\ .29$ for 30
0 from 30° to 70°

From 1868 to 1872 no correction at all.

For Smyth, I employed:

$+0''.5$ from 10° to 20°
$+0\ .4$ from 20 to 30
$+0\ .7$ from 30 to 60
$+0\ .6$ from 60 to 70

For Quetelet, at first, $-0''.3$ from 10° to 20°, and $-0''.4$ from 20° to 30°; afterward, and in other declinations, none.

For the Pulcova *fundamental* Catalogue, $+0''.4$; and for the Meridian Circle Observations (Vol. VI), $+0''.9$. This last value should be less near the zenith. I used $+0''.3$ for a few stars north of 60°, which Vice-Director Wagner kindly sent me.

For Schjellerup and Yarnall, I used NO systematic correction; so also for Argelander's, Bonn, and Engelmann's Leipzig observations.

The admirable Leiden series was corrected by:

$-0''.1$ from 40° to 50°
$-0\ .2$ from 50 to 60
$-0\ .4$ from 60 to 70

For the Washington Transit Circle Observations, the following are the systematic corrections employed:

	1866–67	1872	1873
10° to 20°	+0″.8	−0″.8	+1″.67
20 to 30	+0. 8	−0. 4	+1. 4
30 to 40	+0. 6*	−0. 4	+1. 3
40 to 50	0.*	−0. 2	+0. 9
50 to 60	0.	−0. 2	+0. 6
60 to 70	−0. 2	−0. 2	

* From 34° to 44°, the correction was interpolated between 0″.6 and 0″.0.

In conclusion, I may remark that experience has shown the importance of keeping a continual watch over predicted star-positions, owing in part to the uncertainty of the older observations, and the consequent difficulty of the prediction; it will, therefore, be well if any suspected stars are immediately made known to me, in order that any discrepancies may be detected by the newer observations now published and in progress.

I remain, sir, very respectfully, yours,

T. H. SAFFORD.

Cat. No.	Number and Catalogue.	Mag.	Class.	Right ascension, 1875.0.	Annual precession.	Proper motion.	Declination, 1875.0.	Annual precession.	Proper motion.	Log. a'.	Log. b'.	Log. c'.	Log. d'.
				h. m. s.	*s.*	*s.*	° ′ ″	″	″				
1	4079	7.7	C	12 0 47.77	+3.070	.	10 21 33.1	—20.05	. .	1.3022*n*	7.5429	9.6309	9.2548*n*
2	4081	8.2	B	1 12.74	3.069	.	14 12 45.0	20.05		1.3022*n*	7.7234	9.6252	9.3901*n*
3	Gr. 1854	7.0	C	3 08	3.1	. .	39 19 48.9	20.05	.	1.3021*n*	8.1355	9.5369	9.8019*n*
4	4099	6.7*	A	4 09.29	3.063	.	17 30 18.6	20.05	+0.008	1.3021*n*	8.2583	9.6225	9.4782*n*
5	4100	6.7*	B	12 4 24.93	+3.058		27 58 38.0	—20.05	—0.05	1.3021*n*	8.2848	9.5935	9.6712*n*
6	4108	6.5	B	12 5 30.28	+3.020	—0.004	57 45 02.0	—20.05	—0.016	1.3020*n*	8.3806	9.4011	9.9271*n*
7	4107	6*	A	5 30.51	3.055	—0.004	26 34 00.5	20.05	0.033	1.3020*n*	8.3808	9.6008	9.6504*n*
8	4110	6*	A	5 47.82	3.058	. .	21 14 17.8	20.05	0.020	1.3020*n*	8.4030	9.6166	9.5589*n*
9	4114	6*	A	7 04.01	3.064	—0.005	10 57 28.6	20.04	0.012	1.3020*n*	8.4889	9.6362	9.2788*n*
10	4121	6.7*	A	12 8 31.26	+3.002	+0.003	54 07 48.9	—20.04	—0.03	1.3019*n*	8.5702	9.4539	9.9084*n*
11	4123	4.3*	A	12 9 13.97	+2.986	+0.019	57 43 38.2	—20.04	0.00	1.3018*n*	8.6051	9.4244	9.9268*n*
12	4125	5*	A	9 39.27	3.055	—0.004	15 35 42.4	20.04	—0.012	1.3018*n*	8.6244	9.6327	9.4291*n*
13	4126	5.6*	A	9 51.47	3.021	+0.003	41 21 21.8	20.03	0.035	1.3018*n*	8.6335	9.5491	9.8196*n*
14	4127	5.6*	A	10 00.96	3.044	.	24 38 25.5	20.04	0.040	1.3018*n*	8.6404	9.6155	9.6197*n*
15	4128	5*	B	12 10 12.97	+3.031	.	33 45 37.8	—20.03	—0.07	1.3017*n*	8.6490	9.5860	9.7444*n*
16	10 Heis Cam.	6*	C	12 11 13	+3.0	.	29 37 49.2	—20.03		1.3016*n*	8.6895	9.6035	9.6936*n*
17	Rü. 3894	7.0	C	11 23	3.1	.	15 50 27.7	20.03	.	1.3016*n*	8.6959	9.6344	9.4356*n*
18	4139	6.6	B	12 43.71	3.034		20 42 10.8	20.03	—0.03	1.3015*n*	8.7444	9.6155	9.6519*n*
19	4141	6.7*	A	13 00.36	3.038	. .	23 43 44.9	20.02	—0.015	1.3015*n*	8.7537	9.6233	9.6040*n*
20	4142	6.5	A	12 13 13.76	+3.028	—0.015	28 51 19.6	—20.02	—0.138	1.3014*n*	8.7611	9.6105	9.6829*n*
21	4147	7.0	B	12 13 33.30	+3.027	. .	29 09 31.3	—20.02	—0.009	1.3014*n*	8.7717	9.6104	9.6870*n*
22	4148	5.6*	B	13 38.88	2.978	+0.001	49 40 41.4	20.02	0.00	1.3014*n*	8.7746	9.5134	9.8814*n*
23	Gr. 1867	6.5	C	14 00	3.0	.	38 35 47.4	20.02		1.3014*n*	8.7856	9.5766	9.7943*n*
24	4152	6.7*	B	14 01.31	3.030	.	26 41 44.1	20.02	+0.03	1.3014*n*	8.7863	9.6182	9.6517*n*
25	4153	6.2	C	12 14 02.52	+3.029		27 19 02.0	—20.02	—0.13	1.3013*n*	8.7872	9.6166	9.6609*n*
26	4156	5*	A	12 14 24.03	+3.043	—0.007	18 29 01.4	—20.01	+0.086	1.3013*n*	8.7979	9.6349	9.5002*n*
27	Rü. 3921	6.5	C	14 29	3.0	. . .	16 14 06.3	20.01	.	1.3013*n*	8.8004	9.6377	9.4456*n*
28	4159	6*	B	14 46.98	2.930	+0.007	58 33 37.1	20.01	—0.081	1.3013*n*	8.8093	9 4492	9.9302*n*
29	XII, 57	6*	C	15 54	3.0	. .	25 28 04.2	20.01	. .	1.3011*n*	8.8409	9.6248	9.6234*n*
30	4169	5*	A	12 16 13.18	+3.024	—0.001	26 32 24.5	—20.00	+0.004	1.3011*n*	8.8495	9.6230	9.6490*n*
31	4177	6*	A	12 17 37.76	+2.975	—0.006	43 14 07.1	—19.99	0.00	1.3009*n*	8.8856	9.5667	9.8344*n*
32	4178	7.0	B	17 47.01	3.019	. .	26 32 41.2	19.99	0.00	1.3009*n*	8.8894	9.6261	9.6489*n*
33	4180	5.6*	A	17 56.51	2.936	—0.003	52 15 17.3	19.99	0.00	1.3008*n*	8.8932	9.5151	9.8967*n*
34	4181	5.6*	B	18 02.17	3.018	—0.001	26 47 31.0	19.99	—0.022	1.3008*n*	8.8955	9.6261	9.6526*n*
35	4184	6.7*	A	12 18 57.69	+3.020	+0.005	24 37 13.4	—19.98	—0.05	1.3007*n*	8.9172	9.6323	9.6182*n*
36	4185	6.7*	C	12 19 04.14	+2.896	—0.004	57 28 15.4	—19.98	—0.036	1.3007*n*	8.9196	9.4821	9.9244*n*
37	Gr. 1888	6.0	B	19 15.88	2.836	.	64 29 43.9	19.98	. .	1.3006*n*	8.9241	9.4193	9.9539*n*
38	4188	5.6*	A	19 41.28	2.976	—0.006	39 42 43.9	19.98	—0.048	1.3006*n*	8.9335	9.5934	9.8036*n*
39	4191	5*	A	20 08.93	3.009	+0.001	27 57 39.3	19.98	0.020	1.3005*n*	8.9435	9.6278	9.6694*n*
40	4194	6.7*	B	12 20 33.18	+2.894	+0.002	55 51 04.5	—19.97	—0.005	1.3004*n*	8.9521	9.5020	9.9161*n*
41	4195	4.5*	A	12 20 42.35	+3.004	—0.005	28 57 48.9	—19.97	—0.082	1.3004*n*	8.9553	9.6267	9.6833*n*
42	4196	5*	B	20 44.22	3.008	.	27 31 05.1	19.97	—0.011	1.3004*n*	8.9560	9.6300	9.6629*n*
43	4199	6.5	A	21 23.19	3.009	.	26 36 16.4	19.97	0.00	1.3003*n*	8.9693	9.6331	9.6492*n*
44	Gr. 1894	6*	C	21 25	3.0	.	42 02 51.4	19.96	. .	1.3003*n*	8.9700	9.5851	9.8240*n*
45	4203	6.5*	B	12 21 37.83	+2.881	—0.005	56 24 17.7	—19.96	—0.035	1.3002*n*	8.9742	9.5032	9.9187*n*
46	4205	6.5	B	12 22 23.51	+3.005	. .	26 55 8.3	—19.96	0.00	1.3001*n*	8.9892	9.6345	9.6538*n*
47	4206	7.2	B	22 29.85	3.006	. .	26 35 30.4	19.96	0.00	1.3001*n*	8.9913	9.6354	9.6488*n*
48	4207	5.6*	A	22 40.13	3.006	+0.001	26 36 19.0	19.96	—0.005	1.3000*n*	8.9945	9.6358	9.6490*n*
49	4209	6*	C	23 11.77	3.009	.	24 48 01.2	19.95	.	1.2999*n*	9.0046	9.6398	9.6205*n*
50	4212	6*	A	12 23 26.46	+3.017	+0.009	21 35 18.6	—19.95	—0.027	1.2999*n*	9.0090	9.6444	9.5635*n*
51	4216	5.6*	A	12 24 06.68	+2.837	—0.005	59 05 37.2	—19.94	+0.064	1.2998*n*	9.0212	9.4955	9.9311*n*
52	4217	6*	B	24 07.89	2.889	—0.024	52 13 31.5	19.94	—0.016	1.2998*n*	9.0216	9.5427	9.8954*n*
53	4219	6.7*	B	24 12.48	2.832		59 27 33.7	19.94	0.02	1.2997*n*	9.0230	9.4932	9.9327*n*
54	4218	8.0	B	24 12.66	3.045	.	10 24 31.1	19.94	0.055	1.2997*n*	9.0230	9.6491	9.2544*n*
55	4222	5*	A	12 24 37.63	+2.695	+0.003	69 53 38.0	—19.94	—0.08	1.2997*n*	9.0304	9.3977	9.9702*n*
56	4223	6.5*	A	12 24 46.02	+3.003	+0.002	25 15 30.4	—19.94	—0.013	1.2996*n*	9.0328	9.6419	9.6276*n*
57	Gr. 1903	6*	B	24 52.91	2.873	—0.001	53 45 41.5	19.93	+0.201	1.2996*n*	9.0349	9.5364	9.9041*n*
58	4228	6.7*	A	26 43.24	3.041	—0.003	10 59 08.0	19.92	—0.007	1.2992*n*	9.0657	9.6514	9.2771*n*
59	4231	7.3	A	27 18.38	2.996	.	25 08 19.3	19.91	0.00	1.2991*n*	9.0751	9.6467	9.6251*n*
60	4232	6.7*	A	12 27 20.29	+2.997	—0.003	24 58 23.3	—19.91	—0.007	1.2990*n*	9.0756	9.6470	9.6224*n*
61	4233	5.6*	A	12 27 29.44	+2.963	.	33 56 19.5	—19.91	—0.03	1.2990*n*	9.0779	9.6302	9.7447*n*
62	4235	4.5*	A	27 48.19	2.925	—0.063	42 02 13.1	19.90	+0.291	1.2990*n*	9.0828	9.6056	9.8226*n*
63	4240	5*	A	28 37.32	2.999	. . .	23 19 04.8	19.90	0.02	1.2988*n*	9.0954	9.6510	9.5941*n*
64	4241	5*	A	28 50.16	3.013	+0.003	19 03 55.9	19.89	0.023	1.2987*n*	9.0986	9.6542	9.5106*n*
65	4242	5*	A	12 28 51.58	+3.013	+0.003	19 03 55.5	—19.89	+0.023	1.2987*n*	9.0990	9.6543	9.5106*n*

(53) = B. A. C. 4219, (75 Ursæ.) This star belongs properly in Class C.

Cat. No.	Number and Catalogue.	Mag.	Class.	Right ascension, 1875.0.	Annual precession.	Proper motion.	Declination, 1875.0.	Annual precession.	Proper motion.	Log. a'.	Log. b'.	Log. c'.	Log. d'.
				h. m. s.			° ′ ″						
66	4244	7.0	B	12 29 04.40	+2.943	. .	37 06 52.4	—19.89	. .	1.2986*n*	9.1021	9.6257	9.7771*n*
67	Gr. 1907	7.0	C	29 43	2.9	. .	40 22 23.9	19.88	. .	1.2985*n*	9.1117	9.6174	9.8078*n*
68	4248	6*	A	30 42.23	3.014	—0.001	17 46 43.0	19.87	—0.026	1.2983*n*	9.1257	9.6570	9.4789*n*
69	4258	6*	B	32 45.14	2.902	—0.001	41 33 45.5	19.85	0.022	1.2977*n*	9.1536	9.6226	9.8173*n*
70	XII, 148	6.7*	C	12 32 50	+3		23 20 51.0	—19.85	—0.03	1.2977*n*	9.1547	9.6580	9.5936*n*
71	4260	6*	A	12 32 54.15	+2.995	—0.003	21 45 01.7	—19.85	—0.009	1.2977*n*	9.1556	9.6590	9.5644*n*
72	19 Heis Can.	6*	C	33 12	2.9	. .	36 38 22.4	19.84	. .	1.2976*n*	9.1594	9.6378	9.7712*n*
73	4267	7.0	A	35 16.41	3.031	—0.007	11 06 44.7	19.82	—0.013	1.2970*n*	9.1855	9.6583	9.2798*n*
74	4271	5*	A	35 33.43	3.031	+0.005	10 55 29.8	19.81	0.096	1.2969*n*	9.1890	9.6583	9.2724*n*
75	4276	6*	A	12 36 05.81	+2.652	—0.002	63 23 58.4	—19.80	—0.03	1.2968*n*	9.1955	9.5244	9.9460*n*
76	XII, 166	8.1	C	12 36 57	+3.0		10 47 16.4	—19.79	—0.04	1.2965*n*	9.2056	9.6592	9.2666*n*
77	Gr. 1918	6.7*	C	37 35	2.7		61 50 22.0	19.78	.	1.2963*n*	9.2129	9.5425	9.9394*n*
78	R. C. 2904	8.1	C	38 04	2.7	. .	59 33 20.1	19.78		1.2961*n*	9.2184	9.5592	9.9296*n*
79	*4282	6*	B	38 32.87	2.849	.	44 47 15.6	19.77	. .	1.2960*n*	9.2238	9.6293	9.8417*n*
80	F. 2135	7.2	B	12 38 34.23	+2.780	—0.047	52 27 01.2	—19.77	—0.167	1.2960*n*	9.2240	9.5990	9.8930*n*
81	4285	6.5*	A	39 04.43	+2.881	—0.023	39 57 30.2	—19.76	+0.148	1.2958*n*	9.2296	9.6450	9.8014*n*
82	4287	5.6*	B	39 15.08	2.834	.	46 07 26.6	19.76	+0.02	1.2958*n*	9.2315	9.6269	9.8514*n*
83	4288	6*	B	40 01.47	3.029	+0.019	10 14 20.8	19.75	—0.453	1.2955*n*	9.2399	9.6607	9.2432*n*
84	4290	5*	C	40 23.99	2.998	. .	17 15 38.1	19.74	. .	1.2954*n*	9.2440	9.6687	9.4656*n*
85	4292	6.7*	A	12 40 56.00	+3.018	+0.002	12 38 30.8	—19.74	—0.024	1.2952*n*	9.2496	9.6649	9.3332*n*
86	4360	6.6*	B	12 41 58.22	+2.584	.	63 27 49.8	—19.72	—0.02	1.2948*n*	9.2603	9.5524	9.9443*n*
87	4299	6.7*	A	41 58.63	3.009	—0.004	14 14 12.4	19.72	—0.027	1.2948*n*	9.2604	9.6678	9.3825*n*
88	Gr. 1925	6.7*	C	42 05	2.8	.	50 50 24.5	19.72	.	1.2948*n*	9.2615	9.6187	9.8422*n*
89	4302	5.6*	A	42 27.28	2.477	—0.006	67 28 23.0	19.71	—0.003	1.2947*n*	9.2653	9.5268	9.9580*n*
90	XII, 188	7.3	C	12 42 33	+3.0		12 47 00.5	—19.71	—0.13	1.2946*n*	9.2662	9.6665	9.3374*n*
91	4301	6.5*	A	12 42 38.33	+3.005	0.000	14 48 19.9	—19.71	—0.019	1.2946*n*	9.2671	9.6691	9.3999*n*
92	4303	6*	B	42 56.47	2.783	.	49 08 54.5	19.70	—0.003	1.2945*n*	9.2701	9.6281	9.8711*n*
93	4304	6*	A	43 11.92	2.936	—0.007	28 14 00.8	19.70	+0.031	1.2944*n*	9.2727	9.6729	9.6672*n*
94	4305	6.7*	A	43 12.49	2.619	+0.010	61 00 07.0	19.70	0.00	1.2944*n*	9.2728	9.5732	9.9311*n*
95	4311	5.6*	A	12 44 14.34	+2.869	.	38 11 50.4	—19.68	. .	1.2940*n*	9.2829	9.6624	9.7831*n*
96	XII, 198	7.0	B	12 45 01.66	+2.977		19 50 28.0	—19.67	. . .	1.2937*n*	9.2905	9.6761	9.5223*n*
97	4315	5*	A	45 36.53	2.929		28 13 16.9	19.66	—0.024	1.2935*n*	9.2960	9.6774	9.6661*n*
98	XII, 202	6.7*	B	45 44.01	2.976	. .	19 51 07.7	19.66	. .	1.2935*n*	9.2972	9.6771	9.5223*n*
99	4318 } 7.7* { 6.5	B	45 59.23	2.986	—0.001	17 45 16.0	19.65	—0.006	1.2934*n*	9.2995	9.6758	9.4754*n*
100	4319 } { 7.2	B	12 46 09.69	+2.985	+0.007	17 47 22.3	—19.65	—0.055	1.2933*n*	9.3012	9.6760	9.4762*n*
101	4328	5*	A	12 47 08.37	+2.961	—0.006	21 55 30.0	—19.63	—0.027	1.2929*n*	9.3101	9.6801	9.5629*n*
102	4329	6*	A	47 33.35	3.007	0.000	13 05 54.4	19.62	0.027	1.2927*n*	9.3139	9.6714	9.3459*n*
103	4335	2*	A	48 31.47	2.644	+0.016	56 38 18.4	19.60	—0.044	1.2924*n*	9.3225	9.6171	9.9120*n*
104	4341	6*	C	49 13.78	2.756	.	47 52 30.1	19.59		1.2921*n*	9.3287	9.6524	9.8601*n*
105	4345 } 3.2* {	A	12 50 09.46	+2.836	—0.020	38 59 24.0	—19.57	+0.057	1.2917*n*	9.3366	9.6757	9.7883*n*
106	4346 } {	AA	12 50 10.69	+2.836	—0.020	38 59 38.1	—19.57	+0.057	1.2917*n*	9.3368	9.6757	9.7883*n*
107	4347	5*	A	50 29.58	2.411	+0.004	66 07 00.7	19.57	—0.056	1.2915*n*	9.3395	9.5746	9.9505*n*
108	4348	6.7*	A	50 48.55	2.624	—0.011	54 46 34.8	19.56	—0.016	1.2914*n*	9.3422	9.6334	9.9014*n*
109	Gr. 1938	6.7*	C	50 52	2.8	.	44 13 43.1	19.56	. .	1.2914*n*	9.3427	9.6669	9.8328*n*
110	4350	6*	C	12 51 25.06	+2.754		46 51 18.8	—19.55	—0.05	1.2911*n*	9.3473	9.6618	9.8521*n*
111	Gr. 1943	7.5	C	12 51 58	+2.3	.	69 17 38.9	—19.54	. . .	1.2909*n*	9.3518	9.5608	9.9597*n*
112	4351	5.0	A	52 44.51	2.971	—0.025	18 05 01.8	19.52	+0.047	1.2906*n*	9.3581	9.6842	9.4803*n*
113	Gr. 1946	7.2	C	53 32	2.3	.	69 22 54.9	19.51	+0.04	1.2902*n*	9.3645	9.5675	9.9593*n*
114	4360	5*	A	54 17.43	2.879	—0.002	31 27 34.6	19.49	—0.017	1.2899*n*	9.3705	9.6925	9.7053*n*
115	39 Heis Can.	6.7*	C	12 54 27	+2.9		32 27 15.3	—19.49	.	1.2898*n*	9.3717	9.6923	9.7173*n*
116	4362	6.7*	A	12 54 58.76	+2.969	+0.002	17 47 51.6	—19.48	—0.027	1.2895*n*	9.3758	9.6864	9.4726*n*
117	4365	5.6*	A	55 11.51	2.310	—0.016	67 16 18.5	19.47	0.024	1.2894*n*	9.3775	9.5884	9.9522*n*
118	4366	6.5*	B	55 21.43	2.578	+0.005	57 02 24.4	19.47	—0.072	1.2894*n*	9.3788	9.6402	9.9110*n*
119	4364	7.0	B	55 27.97	2.942	.	21 56 36.0	19.47	. .	1.2893*n*	9.3796	9.6920	9.5597*n*
120	4367	3.2*	AA	12 55 57.28	+3.005	—0.017	11 37 53.3	—19.46	+0.022	1.2891*n*	9.3833	9.6755	9.2914*n*
121	4371	6*	A	12 56 53.58	+2.389	—0.027	64 16 55.6	—19.44	0.00	1.2886*n*	9.3904	9.6124	9.9412*n*
122	XII, 253	6.5	B	57 06.17	2.921	. .	24 29 54.6	19.43	—0.02	1.2885*n*	9.3920	9.6964	9.6041*n*
123	4384	5*	A	59 53.70	2.816	+0.002	36 28 05.4	19.37	+0.01	1.2872*n*	9.4123	9.7011	9.7591*n*
124	XII, 268	6.7*	C	13 0 13	2.9	.	29 41 57.8	19.36		1.2870*n*	9.4145	9.7038	9.6798*n*
125	4389	6*	C	13 0 14.52	+2.712	.	45 56 14.0	—19.36		1.2870*n*	9.4147	9.6888	9.8413*n*
126	4387	6*	A	13 0 15.65	+2.932	—0.002	21 49 28.3	—19.36	—0.057	1.2870*n*	9.4148	9.6985	9.5551*n*
127	4388	6*	A	0 17.57	2.921	+0.005	23 17 14.7	19.36	0.033	1.2870*n*	9.4151	9.7001	9.5818*n*
128	4390	5*	A	1 10.78	2.881	0.003	28 17 45.6	19.34	0.096	1.2865*n*	9.4213	9.7051	9.6601*n*
129	4392	6.7*	A	1 26.48	2.385	+0.005	62 42 44.2	19.34	0.06	1.2864*n*	9.4231	9.6378	9.9330*n*
130	4393	6.8	B	13 1 54.55	+2.881	.	28 13 35.6	—19.33	—0.08	1.2861*n*	9.4263	9.7063	9.6588*n*

(96) = Pi. XII, 198. The A. R. is uncertain.
(98) Pi. XII, 202. Following of two components; the companion is about 0ˢ.8 preceding and 15″.6 south.

Cat. No.	Number and Catalogue.	Mag.	Class.	Right ascension, 1875.0.	Annual precession.	Proper motion.	Declination, 1875.0.	Annual precession.	Proper motion.	Log. a'.	Log. b'.	Log. c'.	Log. d'.
				h. m. s.			° ′ ″						
131	4403	6.7*	A	13 3 39.15	+2.956	0.000	17 30 57.2	—19.28	0.00	1.2852*n*	9.4380	9.6957	9.4616*n*
132	4407	6.7*	A	3 52.82	2.783	. . .	36 05 22.8	19.28	+0.01	1.2851*n*	9.4396	9.7086	9.7731*n*
133	4406	5.4*	A	3 54.36	2.950	—0.030	18 11 28.1	19.28	+0.140	1.2851*n*	9.4397	9.6974	9.4773*n*
134	4408	6.3	B	3 56.81	2.771	+0.002	39 12 01.1	19.28	—0.004	1.2850*n*	9.4400	9.7078	9.7836*n*
135	4414	7.0	B	13 4 16.60	+2.767	—0.006	39 23 24.4	—19.27	0.00	1.2848*n*	9.4421	9.7084	9.7852*n*
136	4415	6.2	A	13 4 18.71	+2.770	—0.004	39 09 49.6	—19.27	+0.048	1.2848*n*	9.4425	9.7087	9.7831*n*
137	4416	6.7*	C	4 25.34	2.489	. .	57 29 53.4	19.27	0.06	1.2848*n*	9.4431	9.6694	9.9086*n*
138	XIII, 12	6.7*	C	5 00	2.3	.	62 53 42.4	19.25	—0.05	1.2845*n*	9.4469	9.6501	9.9318*n*
139	4420	6.7	B	5 48.03	2.737	—0.001	41 27 27.2	19.23	—0.03	1.2840*n*	9.4521	9.7098	9.8028*n*
140	4421	4.5*	A	13 6 02.34	+2.865	—0.058	28 30 44.1	—19.23	+0.88	1.2839*n*	9.4536	9.7134	9.6606*n*
141	XIII, 14	6.5	C	13 6 08	+2.9	. .	24 55 27.3	—19.22		1.2838*n*	9.4542	9.7105	9.6064*n*
142	4423	6.7*	B	6 19.72	2.988	. .	12 13 17.9	19.22	.	1.2837*n*	9.4554	9.6853	9.3073*n*
143	XIII, 18	6.5	C	6 30	2.9		19 24 57.4	19.21	.	1.2836*n*	9.4565	9.7027	9.5032*n*
144	4433	5*	B	8 02.77	2.732	. .	40 48 54.8	19.17	.	1.2827*n*	9.4662	9.7157	9.7959*n*
145	4438	5.6*	B	13 9 54.60	+2.716	—0.008	41 30 56.6	—19.13		1.2816*n*	9.4776	9.7193	9.8009*n*
146	XIII, 36	6.7*	C	13 10 29	+2.9	. .	20 26 40.7	—19.11	. .	1.2813*n*	9.4810	9.7095	9.5223*n*
147	4440	6.0	A	10 34.28	2.999	—0.021	10 04 40.2	19.11	+0.188	1.2812*n*	9.4816	9.6814	9.2221*n*
148	4444	6.5*	A	11 04.63	2.967		14 20 03.4	19.10	0.05	1.2809*n*	9.4846	9.6954	9.3725*n*
149	4448	7.8	C	11 27.96	2.966	.	14 25 22.2	19.09	0.03	1.2807*n*	9.4869	9.6961	9.3754*n*
150	4451	5.4*	A	13 11 56.12	+2.709	—0.010	41 13 52.5	—19.07	+0.029	1.2804*n*	9.4896	9.7241	9.7972*n*
151	4453	6.7*	B	13 12 40.24	+2.782	. .	34 45 23.8	—19.06	. . .	1.2800*n*	9.4939	9.7277	9.7337*n*
152	4456	5*	B	12 55.35	2.569	—0.003	50 20 24.0	19.05	+0.003	1.2798*n*	9.4953	9.7141	9.8640*n*
153	4457	6*	A	13 19.20	2.768	.	35 47 06.3	19.04	. .	1.2796*n*	9.4976	9.7291	9.7443*n*
154	4467	6.5*	B	14 42.77	2.701	—0.002	40 48 26.1	19.00	—0.006	1.2787*n*	9.5055	9.7305	9.7918*n*
155	4468	7.7	C	13 15 13	+2.957		14 48 20.6	—18.98	. .	1.2783*n*	9.5083	9.7006	9.3836*n*
156	XIII, 71	6*	C	13 16 36	+2.6	.	44 33 27.2	—18.94	. .	1.2774*n*	9.5159	9.7318	9.8214*n*
157	4479	6.0	A	18 13.75	2.725	.	37 41 13.9	18.90	. . .	1.2764*n*	9.5247	9.7388	9.7605*n*
158	4484	2*	A	18 53.40	2.413	+0.019	55 34 42.8	18.88	—0.032	1.2759*n*	9.5282	9.7191	9.8902*n*
159	4486	4.2	A	18 54.32	2.413	+0.019	55 34 31.1	18.88	—0.032	1.2759*n*	9.5283	9.7191	9.8902*n*
160	XIII, 77	6*	C	13 19 09	+2.9	.	24 30 23.8	—18.87	. . .	1.2757*n*	9.5296	9.7285	9.5914*n*
161	4493	5*	A	13 20 13	+2.401	+0.018	55 38 22.8	—18.84	—0.033	1.2750*n*	9.5352	9.7226	9.8896*n*
162	Gr. 1991	6*	C	20 55	2.6	. .	46 40 45.4	18.82	. .	1.2745*n*	9.5388	9.7397	9.8342*n*
163	4497	6.5	A	21 43.47	2.118	—0.056	63 54 12.5	18.79	+0.195	1.2739*n*	9.5429	9.7027	9.9251*n*
164	4499	5.6*	A	22 18.99	2.950	—0.016	14 26 49.5	18.77	—0.571	1.2735*n*	9.5459	9.7058	9.3684*n*
165	Gr. 1994	6*	C	13 22 55	+2.7	.	41 22 48.7	—18.75	.	1.2731*n*	9.5490	9.7478	9.7912*n*
166	4504	6*	A	13 23 01.44	+2 975	—0.003	11 28 01.9	—18.75	—0.040	1.2730*n*	9.5495	9.6952	9.2693*n*
167	4510	5.6*	A	23 51.70	2.223	—0.008	60 35 30.0	18.72	+0.006	1.2724*n*	9.5536	9.7200	9.9103*n*
168	4509	7.2	C	23 58	2.900	.	19 42 16.6	18.72	+0.09	1.2723*n*	9.5542	9.7237	9.4980*n*
169	XIII, 113	8.5	C	24 15	2.2	. .	60 34 26.7	18.71	.	1.2721*n*	9.5556	9.7211	9.9100*n*
170	4513	7.8	A	13 24 56.53	+2.846	.	24 52 56.8	—18.69	.	1.2716*n*	9.5590	9.7372	9.5935*n*
171	4519	6*	A	13 25 50.42	+2.619	.	42 44 59.8	—18.66		1.2710*n*	9.5633	9.7536	9.8005*n*
172	XIII, 120	7.6	C	26 30	2.9		15 02 13.2	18.64	.	1.2705*n*	9.5665	9.7115	9.3823*n*
173	4526	6.7*	B	26 52.81	2.841	. .	24 59 47.7	18.63	—0.18	1.2702*n*	9.5683	9.7401	9.5939*n*
174	XIII, 131	6.7*	C	28 53	3.0	.	13 09 17.5	18.56	.	1.2686*n*	9.5777	9.7064	9.3229*n*
175	4536	6*	A	13 29 12.77	+2.677	+0.005	37 49 23.9	—18.55	—0.008	1.2684*n*	9.5792	9.7600	9.7558*n*
176	XIII, 134	6.5	B	13 29 17	+2.854	. .	23 08 09.3	—18.55	+0.11	1.2683*n*	9.5796	9.7389	9.5605*n*
177	4540	6*	B	29 18.90	2.318	+0.001	55 59 22.2	18.55	—0.02	1.2683*n*	9.5797	9.7464	9.8847*n*
178	4538	5*	B	29 20.63	2.473	—0.012	49 39 19.7	18.55	+0.005	1.2683*n*	9.5798	9.7563	9.8482*n*
179	4545	6*	B	29 54.83	2.563	. .	44 50 12.6	18.53	+0.05	1.2678*n*	9.5824	9.7614	9.8139*n*
180	4550	7.2	A	13 31 37.85	+2.377	—0.002	53 19 36.3	—18.47	—0.05	1.2665*n*	9.5902	9.7569	9.8685*n*
181	4552	5*	A	13 31 54.50	+2.679		36 55 52.7	—18.46	0.00	1.2663*n*	9.5915	9.7645	9.7429*n*
182	4553	6.5	B	32 06.49	2.847	.	23 10 03.4	18.46	—0.06	1.2661*n*	9.5924	9.7426	9.5588*n*
183	4555	7.0	B	32 18.01	2.369	. .	53 13 50.5	18.45	—0.02	1.2660*n*	9.5932	9.7587	9.8675*n*
184	4556	6.5	C	32 42.44	2.413		51 21 05.8	18.43		1.2656*n*	9.5950	9.7622	9.8560*n*
185	XIII, 155	6.5	C	13 33 01	+2.9	.	18 54 07.0	—18.42	.	1.2654*n*	9.5964	9.7311	9.4737*n*
186	4559	5*	B	13 33 24.91	+2.964	0.000	11 22 55.2	—18.41	.	1.2650*n*	9.5981	9.7021	9.2581*n*
187	4564	6.5*	B	34 40.09	2.345	—0.013	53 33 13.2	18.37	+0.05	1.2640*n*	9.6036	9.7639	9.8673*n*
188	4562	6.5*	A	34 42.20	2.869	—0.003	20 35 19.6	18.37	0.017	1.2640*n*	9.6038	9.7383	9.5079*n*
189	4563	7.5	C	34 42.69	2.869	.	20 38 48.6	18.37	+0.05	1.2640*n*	9.6038	9.7385	9.5091*n*
190	XIII, 163	6*	C	13 34 53	+2.8	. .	28 41 54.0	—18.36		1.2638*n*	9.6045	9.7587	9.6431*n*
191	4566	6.5*	A	13 35 07.53	+2.841	. .	23 07 47.4	—18.35	—0.034	1.2636*n*	9.6056	9.7462	9.5556*n*
192	Gr. 2030	6.7*	C	35 47	2.2	. . .	57 50 23.4	18.33	.	1.2631*n*	9.6084	9.7593	9.8886*n*
193	4568	5.6*	A	35 59.70	2.285	.	55 18 52.8	18.32	—0.028	1.2628*n*	9.6093	9.7644	9.8758*n*
194	XIII, 167	7.6	C	36 28	2.9	. . .	15 46 45 8	18.30	. .	1.2625*n*	9.6113	9.7232	9.3948*n*
195	Gr. 2032	6.7*	C	13 37 09	+2.6	. . .	42 18 16.9	—18.28	. .	1.2619*n*	9.6142	9.7765	9.7858*n*

(132) 4407. A. R. from Ay. 70 (52ˢ.77, 6 obs.) Ay. 69 and Wn.

(176) = Pi. XIII, 134. The A. R. is uncertain.

Cat. No.	Number and Catalogue.	Mag.	Class.	Right ascension, 1875.0.	Annual precession.	Proper motion.	Declination, 1875.0.	Annual precession.	Proper motion.	Log. a'.	Log. b'.	Log. c'.	Log. d'.
				h. m. s.			° ′ ″						
196	4577	6*	B	13 37 36.21	+1.862	.	65 27 15.8	—18.26	. . .	1.2615*n*	9.6161	9.7451	9.9182*n*
197	4575	6.3	A	37 50.76	2.832	. .	23 19 53.4	18.25	—0.02	1.2613*n*	9.6171	9.7500	9.5569*n*
198	XIII, 189	6*	C	39 04	2.3	.	52 41 36.6	18.21	0.02	1.2603*n*	9.6221	9.7754	9.8587*n*
199	XIII, 200	6.7*	B	40 35.83	2.212	+0.012	56 31 08.6	18.15	0.358	1.2589*n*	9.6284	9.7737	9.8779*n*
200	4592	6.7*	C	13 40 36	+2.723		31 31 36.7	—18.15	—0.08	1.2589*n*	9.6284	9.7724	9.6752*n*
201	4595	6.0	C	13 40 54.28	+2.608	.	39 07 49.2	—18.14	.	1.2586*n*	9.6296	9.7821	9.7566*n*
202	4594	6*	A	40 54.99	2.789	—0.002	26 19 48.3	18.14	—0.064	1.2586*n*	9.6296	9.7619	9.6034*n*
203	4596	6.5*	B	40 55.24	2.563	. .	41 42 58.7	18.14	0.05	1.2586*n*	9.6297	9.7836	9.7797*n*
204	4597	5.4*	AA	41 19.36	2.885	—0.031	18 04 50.5	18.12	+0.040	1.2583*n*	9.6313	9.7366	9.4480*n*
205	4600	5.6*	C	13 41 36.53	+2.604		39 10 07.9	—18.11	.	1.2580*n*	9.6324	9.7834	9.7563*n*
206	4605	6*	B	13 41 55.68	+2.248	+0.005	55 03 27.6	—18.10	—0.026	1.2577*n*	9.6337	9.7790	9.8692*n*
207	4607	2*	AA	42 36.81	2.383	—0.010	49 56 16.1	18.08	0.014	1.2571*n*	9.6364	9.7858	9.8388*n*
208	4609	6.7*	B	42 48.39	2.537		42 40 23.5	18.07	—0.03	1.2569*n*	9.6372	9.7874	9.7859*n*
209	4610	6*	A	43 00.25	2.711	. .	31 48 42.8	18.06	. .	1.2567*n*	9.6379	9.7764	9.6765*n*
210	4615	4.5*	B	13 43 26.87	+2.899	—0.006	16 25 07.5	—18.04	+0.042	1.2563*n*	9.6397	9.7320	9.4054*n*
211	XIII, 211	7.0	C	13 43 31	+2.9		13 37 54.4	—18.04		1.2563*n*	9.6400	9.7198	9.3264*n*
212	XIII, 214	7.1	C	43 47	2.9	.	13 48 47.2	18.03	.	1.2560*n*	9.6410	9.7209	9.3320*n*
213	4618	5*	A	43 48.21	2.836	+0.005	21 53 07.4	18.03	+0.02	1.2560*n*	9.6411	9.7526	9.5253*n*
214	4621	7.2	B	44 08.33	2.866	0.000	19 15 04.8	18.02	0.00	1.2557*n*	9.6424	9.7438	9.4717*n*
215	XIII, 220	7.4	C	13 44 30	+2.8		21 53 48.6	—18.00		1.2554*n*	9.6438	9.7534	9.5248*n*
216	4627	5.6*	B	13 45 33.36	+2.649		35 23 33.7	—17.96		1.2544*n*	9.6478	9.7861	9.7149*n*
217	4628	6.5*	B	45 38.20	2.650		35 17 10.1	17.96	. .	1.2543*n*	9.6481	9.7861	9.7138*n*
218	Gr. 2055	6*	C	45 41	1.9	. . .	62 06 48.4	17.96	—0.08	1.2543*n*	9.6483	9.7754	9.8985*n*
219	Gr. 2056	6.7*	B	46 09.88	2.070	. .	59 09 31.4	17.94		1.2538*n*	9.6502	9.7825	9.8854*n*
220	XIII, 225	6*	B	13 46 10.88	+2.936	.	12 47 02.1	—17.94	.	1.2538*n*	9.6502	9.7177	9.2966*n*
221	4632	5.7	B	13 46 16.53	+2.651	. .	35 03 51.3	—17.93	. .	1.2537*n*	9.6506	9.7868	9.7108*n*
222	4634	7.2	A	46 32.18	2.884	0.000	17 20 52.4	17.92	0.00	1.2534*n*	9.6516	9.7386	9.4258*n*
223	4637	6.5	A	47 14.59	2.869	0.000	18 32 59.3	17.90	+0.012	1.2528*n*	9.6542	9.7442	9.4532*n*
224	4640	6.0	A	47 30.16	2.732	—0.005	29 15 50.2	17.89	0.00	1.2525*n*	9.6552	9.7778	9.6395*n*
225	4646	5*	A	13 47 46.96	+1.752	+0.006	65 20 28.2	—17.88	—0.015	1.2522*n*	9.6562	9.7729	9.9086*n*
226	Gr. 2057	6.7	C	13 47 51	+2.5		40 57 17.7	—17.87	.	1.2522*n*	9.6565	9.7958	9.7666*n*
227	Gr. 2058	6.7	C	48 08	2.5	.	42 48 02.7	17.87	. . .	1.2520*n*	9.6576	9.7974	9.7820*n*
228	4648	3*	AA	48 43.97	2.860	—0.004	19 01 30.5	17.84	—0.354	1.2513*n*	9.6598	9.7475	9.4624*n*
229	4649	6*	B	49 15.04	2.216	+0.013	54 20 37.4	17.82	—0.028	1.2508*n*	9.6617	9.7964	9.8585*n*
230	XIII, 247	6.7*	C	13 49 49	+2.9	.	14 40 10.7	—17.79		1.2503*n*	9.6637	9.7296	9.3517*n*
231	4652	6*	B	13 50 37.77	+2.675	. . .	32 38 34.8	—17.76	. .	1.2495*n*	9.6663	9.7892	9.6792*n*
232	4656	5*	A	50 51.72	2.739	+0.005	28 06 21.2	17.75	—0.055	1.2492*n*	9.6675	9.7795	9.6202*n*
233	XIII, 255	6.8	C	51 13	2.8		21 33 58.4	17.74	.	1.2489*n*	9.6688	9.7597	9.5121*n*
234	4662	6.7*	A	52 37.82	2.899	. .	15 15 38.4	17.68	—0.05	1.2475*n*	9.6738	9.7346	9.3656*n*
235	4664	6*	A	13 52 47.53	+2.812	+0.003	22 18 24.9	—17.67	—0.06	1.2473*n*	9.6744	9.7639	9.5244*n*
236	XIII, 273	7.5	C	13 52 59	+1.7	.	65 58 16.7	—17.66	—0.28	1.2471*n*	9.6751	9.7842	9.9056*n*
237	XIII, 279	7.3	C	55 16	2.9	.	14 20 12.2	17.57	. .	1.2448*n*	9.6831	9.7322	9.3364*n*
238	4675	6*	A	55 30.39	2.728	—0.005	27 59 28.2	17.56	+0.012	1.2445*n*	9.6839	9.7852	9.6138*n*
239	XIII, 280	7.0	C	55 40	2.9		17 21 41.9	17.55		1.2443*n*	9.6844	9.7470	9.4170*n*
240	XIII, 281	6.7*	C	13 55 40	+2.9		18 16 37.8	—17.55		1.2443*n*	9.6844	9.7510	9.4386*n*
241	XIII, 285	7.7	C	13 55 41	+1.7	.	64 59 27.3	—17.55		1.2443*n*	9.6845	9.7936	9.8994*n*
242	4676	7.0	A	55 49.66	2.664		32 10 11.6	17.55		1.2442*n*	9.6850	9.7959	9.6683*n*
243	4678	7.5	A	57 00.45	2.659		32 15 49.0	17.50	.	1.2429*n*	9.6890	9.7978	9.6681*n*
244	XIII, 289	6.0	C	57 14	2.4		46 21 36.0	17.49		1.2427*n*	9.6898	9.8154	9.8001*n*
245	4684	6.7*	C	13 58 20.64	+2.239		51 34 25.0	—17.44	.	1.2415*n*	9.6935	9.8172	9.8333*n*
246	4689	6.7*	A	13 59 05.63	+1.316		69 16 50.8	—17.41	.	1.2407*n*	9.6960	9.7910	9.9095*n*
247	XIII, 303	6.9	B	14 0 32.08	2.859	.	17 34 01.2	17.34	.	1.2391*n*	9.7007	9.7522	9.4167*n*
248	4694	7.2	A	0 53.57	2.660	. .	31 26 54.2	17.33	—0.11	1.2387*n*	9.7019	9.8013	9.6540*n*
249	4696	3.4*	AA	1 00.36	1.629	—0.005	64 58 25.5	17.32	+0.008	1.2386*n*	9.7023	9.8062	9.8936*n*
250	XIII, 309	7.0	C	14 1 20	+2.7	. .	29 02 04.6	—17.31		1.2382*n*	9.7033	9.7955	9.6221*n*
251	Gr. 2077	7.0	C	14 2 16	+2.4		42 41 40.5	—17.27	.	1.2372*n*	9.7063	9.8220	9.7663*n*
252	4699	6.5*	A	2 55.85	2.401		44 26 59.3	17.24	—0.03	1.2364*n*	9.7084	9.8245	9.7796*n*
253	XIV, 1	7.0	C	3 37	2.9	.	16 12 58.5	17.21	0.05	1.2357*n*	9.7106	9.7482	9.3795*n*
254	4701	6*	A	3 37.04	2.357	—0.004	50 02 58.0	17.21	0.01	1.2357*n*	9.7106	9.8276	9.8180*n*
255	4706	5*	A	14 4 41.89	+2.738	+0.001	25 41 04.8	—17.16	—0.055	1.2344*n*	9.7140	9.7891	9.5692*n*
256	Gr. 2082	6.0	C	14 4 54	+1.9	.	59 55 49.6	—17.15	.	1.2342*n*	9.7147	9.8235	9.8692*n*
257	4714	6.5	A	5 48.05	2.621	. .	32 53 03.4	17.11	+0.04	1.2330*n*	9.7179	9.8115	9.6656*n*
258	Gr. 2083	6.6	C	6 36	2.4	. .	42 55 43.5	17.07		1.2322*n*	9.7199	9.8293	9.7627*n*
259	Gr. 2084	6.5	B	7 04.24	+1.892	.	59 08 22.8	—17.05	+0.04	1.2317*n*	9.7214	9.8390	9.8532*n*
260	XIV, 20	6.7*	C	14 7 45	2.9		12 35 05.0	17.02		1.2309*n*	9.7235	9.7314	9.2669*n*

(221) = B. A. C. 4632. 2 observations by Prof. Yarnall in 1873 give declination 50″.4.

Cat. No.	Number and Catalogue.	Mag.	Class.	Right ascension, 1875.0	Annual precession.	Proper motion.	Declination, 1875.0	Annual precession.	Proper motion.	Log. a'.	Log. b'.	Log. c'.	Log. d'.
				h. m. s.			° ′ ″						
261	4721	6.5*	A	14 8 04.55	+2.901	−0.015	13 32 47.6	−17.00	−0.061	1.2305*n*	9.7244	9,7372	9.2980*n*
262	4723	7.0	B	8 21.13	2.666	. .	29 41 26.1	16.99	. .	1.2302*n*	9.7253	9.8062	9.6229*n*
263	4724	6.5*	B	8 43.67	2.935	+0.002	10 41 25.1	16.97	−0.158	1.2297*n*	9.7264	9.7203	9.1959*n*
264	XIV, 26	6.7*	C	8 53	2.8	.	22 27 27.8	16.96	. .	1.2295*n*	9.7269	9.7815	9.5094*n*
265	4725	7.2	B	14 8 59.17	+2.146	+0.014	52 22 22.7	−16.96	−0.043	1.2294*n*	9.7272	9.8373	9.8260*n*
266	4726	4.5*	B	14 9 00.33	+2.146	+0.014	52 22 29.4	−16.96	−0.043	1.2294*n*	9.7272	9.8373	9.8260*n*
267	4728	6*	B	9 21.10	2.425	.	42 06 22.5	16.94	0.13	1.2290*n*	9.7283	9.8329	9.7532*n*
268	4729	1*	AA	9 57.61	2.812	−0.078	19 50 03.1	16.91	1.97	1.2282*n*	9.7301	9.7712	9.4567*n*
269	4731	6.7	B	10 11.58	2.816	+0.004	19 29 40.9	16.90	0.041	1.2280*n*	9.7308	9.7698	9.4492*n*
270	4736	7.0	C	14 10 54.00	+2.108		53 07 03.4	−16.87		1.2271*n*	9.7329	9.8406	9.8280*n*
271	4738	6*	B	14 11 19.40	+2.456	.	40 19 30.1	−16.85	.	1.2266*n*	9.7341	9.8336	9.7354*n*
272	4737	6.7*	C	11 29.78	2.865	. .	15 50 33.5	16.84	. .	1.2264*n*	9.7347	9.7525	9.3604*n*
273	4741	4*	A	11 37.87	2.301	−0.016	46 39 47.1	16.83	+0.155	1.2262*n*	9.7350	9.8407	9.7858*n*
274	4742	4.5*	A	11 44.28	2.143	−0.015	51 56 40.1	16.83	+0.078	1.2261*n*	9.7353	9.8423	9.8201*n*
275	4747	5*	A	14 12 42.68	+2.538	.	36 05 13.2	−16.78	.	1.2249*n*	9.7382	9.8280	9.6928*n*
276	4752	6.8	A	14 12 54.38	+2.137	−0.001	51 53 09.4	−16.77	. . .	1.2246*n*	9.7387	9.8444	9.8183*n*
277	4751	6.5*	B	13 13.33	2.894	+0.011	13 34 55.0	16.76	−0.019	1.2242*n*	9.7396	9.7409	9.2928*n*
278	4753	5*	A	13 50.29	2.847	−0.009	16 52 50.1	16.73	+0.079	1.2235*n*	9.7414	9.7599	9.3843*n*
279	4756	7.3	A	14 08.39	2.105		52 36 35.6	16.71	.	1.2231*n*	9.7423	9.8466	9.8210*n*
280	4758	6*	B	14 14 39.72	+2.463	. .	39 22 09.9	−16.69		1.2224*n*	9.7438	9.8370	9.7226*n*
281	Gr. 2102	6.5	C	14 14 47	+2.0		55 26 22.0	−16.68		1.2223*n*	9.7441	9.8470	9.8358*n*
282	Gr. 2105	6.7*	B	17 27.69	1.170	.	68 21 17.1	16.55	. .	1.2188*n*	9.7516	9.8355	9.8849*n*
283	4778	7.8	C	18 18.18	2.483	.	37 46 24.3	16.51	+0.05	1.2178*n*	9.7540	9.8392	9.7027*n*
284	Gr. 2108	7.4	C	18 43	1.1	.	68 22 22.0	16.49	. .	1.2172*n*	9.7551	9.8381	9.8834*n*
285	Gr. 2107	6.8	C	14 19 01	+1.7	.	61 32 13.4	−16.47	−0.10	1.2168*n*	9.7559	9.8500	9.8587*n*
286	4783	6.7*	A	14 20 23.11	+2.450	. .	38 57 31.5	−16.41	. .	1.2150*n*	9.7596	9.8444	9.7113*n*
287	4785	6.5*	A	20 38.57	2.794	−0.002	19 47 24.1	16.39	+0.045	1.2147*n*	9.7603	9.7805	9.4422*n*
288	4789	4*	AA	20 56.49	2.069	−0.025	52 25 45.1	16.38	−0.407	1.2143*n*	9.7611	9.8583	9.8112*n*
289	4797	6.5	A	23 05.90	2.487		36 45 25.5	16.27	. .	1.2114*n*	9.7669	9.8435	9.6862*n*
290	XIV, 97	6.7*	C	14 23 10	+2.7	. .	26 24 50.2	−16.27		1.2113*n*	9.7670	9.8121	9.5572*n*
291	4804	6*	B	14 24 16.87	+2.120	−0.031	50 24 17.5	−16.21	−0.073	1.2097*n*	9.7699	9.8635	9.7944*n*
292	4803	6.7*	B	24 28.40	2.572	. . .	32 20 53.6	16.20		1.2095*n*	9.7704	9.8338	9.6357*n*
293	4805	6.7*	A	24 41.22	2.352	+0.014	42 21 39.4	16.19	−0.21	1.2092*n*	9.7710	9.8563	9.7355*n*
294	4808	4.3*	AA	26 26.56	2.594	−0.006	30 55 15.9	16.10	+0.122	1.2067*n*	9.7755	9.8317	9.6154*n*
295	4809	6*	B	14 26 48.28	+2.666	. .	27 13 51.6	−16.08	−0.08	1.2062*n*	9.7764	9.8191	9.5645*n*
296	4810	6.5*	A	14 26 51.67	+2.735	−0.008	22 48 41.0	−16.07	+0.035	1.2061*n*	9.7766	9.8005	9.4925*n*
297	4812	3.4*	A	27 02.69	2.427	0.004	38 51 21.0	16.06	+0.141	1.2059*n*	9.7770	9.8533	9.7012*n*
298	4817	6*	A	27 48.13	1.442	−0.026	63 44 19.3	16.02	−0.025	1.2048*n*	9.7790	9.8640	9.8553*n*
299	4816	6.8	B	28 13.85	2.453	. .	37 30 45.5	16.00		1.2042*n*	9.7800	9.8519	9.6866*n*
300	XIV, 126	6*	A	14 28 19.16	+1.630	−0.008	60 46 36.8	−16.00	0.00	1.2040*n*	9.7803	9.8681	9.8428*n*
301	Gr. 2129	7.2	C	14 28 47	+1.0	.	68 38 01.0	−15.97	−0.05	1.2034*n*	9.7814	9.8580	9.8703*n*
302	4820	6.7*	B	28 52.40	2.544		33 05 01.2	15.97		1.2032*n*	9.7816	9.8412	9.6382*n*
303	XIV, 119	7.0	C	29 02	2.9	.	13 38 45.8	15.96		1.2030*n*	9.7821	9.7516	9.2736*n*
304	4823	5*	B	29 14.27	2.598	+0.017	30 17 21.5	15.95	.	1.2027*n*	9.7826	9.8327	9.6033*n*
305	4826	7.3	B	14 29 24.37	+1.977	−0.021	53 26 58.5	−15.94	+0.25	1.2025*n*	9.7830	9.8726	9.8052*n*
306	4827	6.7*	C	14 29 31.84	2.191	.	47 20 05.5	15.93	.	1.2023*n*	9.7833	9.8695	9.7666*n*
307	4825	6.7*	A	29 31.91	+2.456	.	37 10 34.2	−15.93		1.2023*n*	9.7833	9.8528	9.6814*n*
308	4830	6*	B	30 17.62	2.103	.	49 54 49.4	15.89	0.00	1.2012*n*	9.7852	9.8727	9.7827*n*
309	4834	6.7	A	30 58.15	1.238	+0.010	65 56 30.3	15.86	+0.04	1.2002*n*	9.7868	9.8668	9.8586*n*
310	XIV, 140	6.1	B	14 32 25.33	+2.790		18 50 34.3	−15.78	−0.09	1.1981*n*	9.7904	9.7853	9.4051*n*
311	4841	6*	B	14 33 31.00	+2.264	. . .	44 10 56.0	−15.72	+0.04	1.1964*n*	9.7930	9.8714	9.7375*n*
312	4843	5.6*	A	34 11.07	2.240	−0.007	44 56 41.7	15.68	−0.018	1.1954*n*	9.7946	9.8735	9.7423*n*
313	4845	6*	B	34 17.27	1.900	.	54 33 51.9	15.68	. .	1.1953*n*	9.7948	9.8805	9.8042*n*
314	4846	6.5	B	34 43.75	2.862	0.00	14 04 21.9	15.65	0.00	1.1946*n*	9.7959	9.7580	9.2783*n*
315	4847	4*	A	14 34 51.05	+2.816	+0.002	16 57 18.9	−15.65	−0.004	1.1944*n*	9.7962	9.7763	9.3571*n*
316	4849	3.4*	A	14 35 10.79	+2.858	+0.005	14 15 56.2	−15.63	−0.012	1.1939*n*	9.7969	9.7596	9.2834*n*
317	4853	6.5*	C	35 43.20	2.889	−0.012	12 12 02.0	15.60	−0.11	1.1931*n*	9.7982	9.7458	9.2159*n*
318	XIV, 160	6.7*	C	36 12	2.7		21 39 38.8	15.57		1.1924*n*	9.7993	9.8033	9.4574*n*
319	4863	6.8	A	37 36.03	2.425		37 17 24.2	15.50	. .	1.1902*n*	9.8026	9.8632	9.6704*n*
320	4864	5*	A	14 37 55.71	+2.637	. .	27 03 37.6	−15.48	−0.009	1.1897*n*	9.8034	9.8297	9.5455*n*
321	4870	6.5*	C	14 38 53.48	+2.329	. . .	40 59 21.6	−15.42	. .	1.1882*n*	9.8056	9.8732	9.7028*n*
322	4874	6*	A	38 56.35	1.478	+0.003	61 47 43.2	15.42	−0.03	1.1881*n*	9.8057	9.8556	9.8310*n*
323	4873	5.4*	B	39 24.58	2.801	−0.002	17 29 41.3	15.39	0.049	1.1874*n*	9.8067	9.7828	9.3632*n*
324	4876	2.3*	AA	39 31.67	2.623	−0.003	27 36 07.9	15.39	−0.002	1.1872*n*	9.8070	9.8335	9.5509*n*
325	4881	6.8	C	14 39 53.41	+2.190	. . .	45 42 55.4	−15.37		1.1866*n*	9.8078	9.8824	9.7393*n*

(279) A. R. quite uncertain.

(295) — B. A. C. 4809. The star's declination is rather uncertain.

Cat. No.	Number and Catalogue.	Mag.	Class.	Right ascension, 1875.0.	Annual precession.	Proper motion.	Declination, 1875.0.	Annual precession.	Proper motion.	Log. a'.	Log. b'.	Log. c'.	Log. d'.
				h. m. s.			° ′ ″						
326	XIV, 178	6*	C	14 40 13	+2.8	.	15 30 30.8	−15.35	+0.05	1.1861*n*	9.8086	9.7719	9.3151*n*
327	4885	7.0	B	40 46.92	2.269	.	42 54 26.8	15.32	+0.06	1.1852*n*	9.8098	9.8792	9.7160*n*
328	Str. 1884	6*	C	42 51	2.7	.	24 53 12.1	15.20	. . .	1.1818*n*	9.8144	9.8248	9.5038*n*
329	4897	6*	A	44 12.29	2.377	−0.021	38 19 38.1	15.12	+0.122	1.1796*n*	9.8174	9.8737	9.6699*n*
330	4902	6*	C	14 44 35.44	+2.581		29 08 04.7	−15.10	.	1.1790*n*	9.8182	9.8447	9.5642*n*
331	4903	6.5*	B	14 44 51.31	+2.138	+0.001	46 38 16.1	−15.08	−0.105	1.1785*n*	9.8188	9.8904	9.7379*n*
332	4907	6*	B	45 26.34	2.046	−0.007	49 14 07.9	15.05	+0.068	1.1776*n*	9.8201	9.8942	9.7547*n*
333	Gr. 2157	6.3	C	45 29	1.9	. .	51 53 34.2	15.05	. . .	1.1775*n*	9.8202	9.8966	9.7312*n*
334	4906	6*	A	45 33.56	2.386	−0.020	37 47 09.0	15.04	+0.093	1.1774*n*	9.8203	9.8739	9.6624*n*
335	4905	5.4*	A	14 45 37.47	+2.756	+0.011	19 37 13.8	−15.04	−0.114	1.1772*n*	9.8205	9.7999	9.4012*n*
336	D.M.16°,2705	6.2	C	14 47 32	+2.8	.	16 12 59.5	−14.93	.	1.1740*n*	9.8245	9.7804	9.3179*n*
337	4917	6.5	C	47 39	2.1	. .	46 59 30.4	14.92	−0.05	1.1738*n*	9.8248	9.8946	9.7357*n*
338	4918	6.5*	A	48 16.06	1.532	−0.016	59 48 09.7	14.89	+0.168	1.1728*n*	9.8261	9.9016	9.8073*n*
339	4926	8*	A	50 19.29	2.830	0.000	14 57 10.2	14.76	+0.019	1.1692*n*	9.8394	9.7736	9.2787*n*
340	4934	6.8	B	14 51 16.99	2.203	.	41 38 26.9	14.71		1.1676*n*	9.8323	9.8898	9.6879*n*
341	4933	6.5*	A	14 51 21.96	+2.795	0.000	16 53 33.3	−14.70	0.00	1.1674*n*	9.8325	9.7873	9.3285*n*
342	4937	6*	A	52 13.95	1.978	+0.004	50 08 25.3	14.65	−0.232	1.1659*n*	9.8342	9.9043	9.7489*n*
343	XIV, 231	7.0	C	52 22	2.8		14 32 21.5	14.64		1.1656*n*	9.8345	9.7720	9.2632*n*
344	4942	6.5	A	54 38.36	2.293	.	40 08 31.4	14.51	. .	1.1616*n*	9.8391	9.8903	9.6688*n*
345	4943	5.6*	B	14 54 49.36	+2.303	−0.004	39 45 43.4	−14.50	+0.04	1.1612*n*	9.8394	9.8896	9.6650*n*
346	XIV, 247	6.7*	B	14 55 16.18	+2.687	.	22 32 30.5	−14.47	.	1.1604*n*	9.8403	9.8236	9.4419*n*
347	4949	5*	A	55 36.16	0.946	−0.006	66 25 50.7	14.45	+0.058	1.1598*n*	9.8410	9.9080	9.8198*n*
348	4952	6*	C	56 22.83	2.046	.	47 46 19.1	14.40	.	1.1584*n*	9.8425	9.9068	9.7257*n*
349	4953	5.4*	B	56 37.99	2.627	+0.002	25 30 11.7	14.39	−0.057	1.1579*n*	9.8430	9.8398	9.4 98*n*
350	4958	3*	A	14 57 14.24	+2.262	−0.002	40 53 04.7	−14.35	−0.036	1.1568*n*	9.8442	9.8950	9.6706*n*
351	4961	6	C	14 58 06.79	+2.398	.	35 41 46.6	−14.30		1.1552*n*	9.8459	9.8817	9.6191*n*
352	4962	7.2	A	58 26.54	2.581	−0.004	27 34 15.6	14.28	−0.04	1.1546*n*	9.8465	9.8510	9.5179*n*
353	4967	6*	B	58 31.52	1.398	−0.005	60 41 45.9	14.27	+0.02	1.1544*n*	9.8467	9.9165	9.7928*n*
354	4965	6*	B	58 41.89	2.127	.	45 08 02.8	14.26		1.1541*n*	9.8470	9.9055	9.7024*n*
355	4969	4.5*	AA	14 59 05.38	+2.582	−0.012	27 26 10.0	−14.24	−0.01	1.1534*n*	9.8478	9.8510	9.5147*n*
356	4974	5.4*	B	14 59 40.16	+2.017	−0.039	48 08 29.2	−14.20	+0.02	1.1523*n*	9.8488	9.9114	9.7221*n*
357	4980	5.6*	A	15 1 17.30	1.992	−0.008	48 38 04.9	14.10	+0.02	1.1492*n*	9.8519	9.9140	9.7224*n*
358	XIV, 281	6*	B	1 36.52	2.745		18 55 35.6	14.08	.	1.1486*n*	9.8525	9 8071	9.3574*n*
359	122 Heis Bo.	6*	C	1 41	2.4	.	36 56 15.2	14.07	.	1.1484*n*	9.8527	9.8892	9.6251*n*
360	4981	5*	A	15 1 48.57	+2.620	+0.010	25 21 25.2	−14.07	−0.184	1.1482*n*	9.8529	9.8434	9.4777*n*
361	4989	6*	A	15 2 03.97	+0.888		66 24 18.9	−14.05	−0.05	1.1477*n*	9.8534	9.9178	9.8076*n*
362	4992	5*	B	2 42.39	1.703	. .	55 02 17.6	14.00	.	1.1461*n*	9.8545	9.9216	9.7575*n*
363	4991	6*	A	3 00.00	2.588	+0.001	26 46 52.1	13.99	−0.033	1.1459*n*	9.8551	9.8513	9.4975*n*
364	4993	6.7*	B	3 08.79	2.612		25 35 17.0	13.98	.	1.1456*n*	9.8554	9.8456	9.4788*n*
365	5000	7.2	B	15 5 34.98	+2.429		33 33 12.7	−13.83		1.1408*n*	9.8598	9.8818	9.5811*n*
366	5001	7.3	B	15 5 38.44	+2.519		29 42 15.9	−13.83	.	1.1407*n*	9.8599	9.8668	9.5336*n*
367	125 Heis Bo.	6*	B	6 23.03	2.728		19 26 51.3	13.78	.	1.1392*n*	9.8612	9.8136	9.3594*n*
368	5019	7.5	B	7 23.45	1.943		49 09 51.9	13.72	.	1.1372*n*	9.86 0	9.9220	9.7139*n*
369	XV, 18	6*	C	8 00	2.6		23 26 55.6	13.68	+0.11	1.1359*n*	9.8641	9.8383	9.4333*n*
370	Gr. 2202	6.3	C	8 41	+1.9	.	49 02 53.0	−13.63	+0.06	1.1346*n*	9.8653	9.9235	9.7105*n*
371	5026	6.7*	B	15 8 49.99	+2.284	. .	38 44 02.7	−13.62	. . .	1.1342*n*	9.8656	9.9018	9.6284*n*
372	5031	5*	A	9 15.49	2.512	−0.007	29 37 45.8	13.59	+0.027	1.1334*n*	9.8663	9.8696	9.5253*n*
373	5033	6.1	B	9 39.21	2.165	. .	42 38 15.3	13.57	.	1.1326*n*	9.8670	9.9127	9.6612*n*
374	5036	3*	AA	10 27.85	2.411	+0.010	33 46 56.4	13.52	−0.114	1.1309*n*	9.8684	9.8873	9.5738*n*
375	XV, 39	6.3	C	15 12 02	+1.8	.	51 24 06.5	−13.42	.	1.1275*n*	9.8711	9.9302	9.7184*n*
376	5048	6*	C	15 12 48.25	+2.688	. .	21 01 52.3	−13.37	. .	1.1260*n*	9.8724	9.8277	9.3788*n*
377	5058	5.6*	A	13 12.62	0.623	+0.037	67 49 18.2	13.34	−0.393	1.1251*n*	9.8731	9.9321	9.7896*n*
378	5061	6.5*	A	14 58.33	2.489	−0.009	30 04 14.6	13.22	−0.058	1.1213*n*	9.8761	9.8763	9.5191*n*
379	F. 2626	6.8	C	15 22	1.4	. .	59 14 52.8	13.20	.	1.1205*n*	9.8767	9.9390	9.7525*n*
380	Gr. 2216	7.0	B	15 15 29.70	+2.182	−0.001	41 25 50.2	−13.19	+0.184	1.1202*n*	9.8769	9.9158	9.6387*n*
381	5064	7.0	B	15 15 33.76	+1.842		50 40 01.9	−13.18		1.1200*n*	9.8771	9.9334	9.7063*n*
382	XV, 53	6.0	C	15 43	2.6	.	25 24 37.5	13.17	.	1.1197*n*	9.8773	9.8546	9.4501*n*
383	F. 2628	6.8	C	15 49	1.4		58 57 22.9	13.17		1.1195*n*	9.8775	9.9395	9.7502*n*
384	5071	6*	B	16 24.71	1.759	. . .	52 24 34.6	13.13	.	1.1182*n*	9.8784	9.9363	9.7150*n*
385	5067	6.7*	A	15 16 28.15	+2.837	+0.001	13 00 58.9	−13.12	−0.014	1.1181*n*	9.8786	9.7731	9.1685*n*
386	5072	5.6*	A	15 16 48.30	+2.404	−0.001	33 22 56.0	−13.10	+0.002	1.1173*n*	9.8791	9.8914	9.5551*n*
387	5077	7.0	C	17 50.20	1.733		52 47 30.1	13.03	−0.06	1.1151*n*	9.8808	9.9383	9.7141*n*
388	5076	6*	C	17 59.92	2.217	. .	40 01 44.0	13.02	. .	1.1147*n*	9.8810	9.9145	9.6209*n*
389	5075	5*	A	18 02.42	2.466	+0.011	30 44 25.5	13.02	−0.196	1.1146*n*	9.8811	9.8818	9.5210*n*
390	5084	4*	A	15 19 46.11	+2.277	−0.011	37 48 59.8	−12.90	+0.079	1.1108*n*	9.8839	9.9096	9.5960*n*

(356) 4974. The position given refers to the point midway between the two stars. Difference of declination used, $3''.3 + 0''.04\ (t-1875.)$

Cat. No.	Number and Catalogue.	Mag.	Class.	Right ascension, 1875.0.	Annual precession.	Proper motion.	Declination, 1875.0.	Annual precession.	Proper motion.	Log. a'.	Log. b'.	Log. c'.	Log. d'.
				h. m. s.			° ′ ″						
391	Gr. 2227	7.0	C	15 19 48	+2.3	. .	37 47 14.6	−12.90	+0.17	1.1107n	9.8839	9.9098	9.5958n
392	5085	5*	A	19 59.55	2.780	−0.002	15 52 08.6	12.89	.	1.1103n	9.8842	9.7971	9.2450n
393	XV, 72	6.8	C	20 16	2.7	.	19 55 17.4	12.87	+0.03	1.1096n	9.8846	9.8255	9.3399n
394	5091	6*	B	20 33.65	0.987		63 47 16.6	12.85	−0.14	1.1090n	9.8851	9.9446	9.7598n
395	5092	6.6	C	15 21 04.89	+1.949		47 30 08.2	−12.82	.	1.1078n	9.8860	9.9346	9.6733n
396	XV, 81	6*	C	15 21 24	+2.4	.	34 46 18.0	−12.80		1.1071n	9.8865	9.9006	9.5610n
397	Gr. 2232	6.8	B	21 42.40	2.050	. .	44 54 26.1	12.78	.	1.1064n	9.8869	9.9297	9.6516n
398	Gr. 2234	7.2	B	21 50.96	1.212	−0.055	60 58 59.8	12.76	+0.18	1.1060n	9.8872	9.9469	9.7456n
399	R. C. 3387	7.3	C	22 08	2.1	. .	44 26 35.9	12.75	−0.07	1.1054n	9.8876	9.9296	9.6484n
400	5097	3*	AA	15 22 09.11	+1.326	+0.003	59 24 16.4	−12.74	+0.011	1.1053n	9.8876	9.9471	9.7381n
401	XV, 83	6*	B	15 22 16.35	+2.578	. .	25 32 16.4	−12.74	−0.02	1.1050n	9.8878	9.8600	9.4375n
402	5098	4*	A	22 40.54	2.485	−0.010	29 32 15.6	12.71	+0.068	1.1041n	9.8884	9.8801	9.4948n
403	XV, 89	6.7*	C	23 27	2.8	.	16 49 34.5	12.66	+0.08	1.1023n	9.8897	9.8061	9.2618n
404	Gr. 2237	6.7*	C	23 52	2.2		39 09 23.5	12.63	. .	1.1013n	9.8903	9.9175	9.5995n
405	5115	6.7*	A	15 25 28.80	+1.180		61 06 07.3	−12.53	−0.02	1.0978n	9.8926	9.9510	9.7379n
406	5113	6.7	C	15 25 24.60	+1.906	. . .	48 08 35.5	−12.52		1.0977n	9.8927	9.9401	9.6676n
407	5116	6*	A	25 27.62	1.047	+0.005	62 42 30.1	12.52	−0.04	1.0976n	9.8927	9.9509	9.7442n
408	Gr. 2240	6.7*	C	25 43	1.5	.	55 37 25.1	12.50		1.0970n	9.8931	9.9495	9.7115n
409	Arg. 167	7.0	C	25 59	1.4		57 52 09.0	12.48	.	1.0964n	9.8935	9.9511	9.7220n
410	5120	6*	B	15 26 24.10	+2.761		16 28 53.1	−12.46	+0.011	1.0954n	9.8942	9.8051	9.2461n
411	5122	4.5	A	15 26 26.36	+2.152	+0.001	41 15 36.1	−12.45	−0.02	1.0953n	9.8942	9.9259	9.6123n
412	XV, 119	6.1	C	27 09	1.0	. . .	62 31 40.1	12.40		1.0936n	9.8953	9.9529	9.7394n
413	5130	4.8	B	27 18.44	2.147	−0.003	41 19 27.9	12.39	−0.02	1.0932n	9.8955	9.9268	9.6108n
414	5126	7.0	A	27 19.02	2.761	+0.003	16 26 10.1	12.39	0.00	1.0932n	9.8955	9.8052	9.2427n
415	5131	4*	B	15 27 53.28	+2.419	−0.004	31 46 56.7	−12.35	0.00	1.0918n	9.8964	9.8942	9.5112n
416	5132	6.7	C	15 28 11	+2.738	.	17 33 39.4	−12.33	.	1.0915n	9.8966	9.8139	9.2689n
417	5135	3.4*	B	28 49.91	2.867	−0.002	10 57 29.6	12.29	+0.023	1.0895n	9.8978	9.7606	9.0663n
418	5147	6*	B	29 11.00	0.841	−0.008	64 37 45.6	12.25	+0.05	1.0886n	9.8983	9.9546	9.7424n
419	5143	2*	AA	29 23.74	2.529	+0.010	27 08 11.7	12.25	−0.097	1.0881n	9.8986	9.8735	9.4450n
420	5146	6*	C	15 29 52.76	+2.725	−0.008	18 04 24.1	−12.22	.	1.0869n	9.8993	9.8186	9.2764n
421	5150	6*	C	15 30 29.15	+2.876	. .	10 25 50.5	−12.17	−0.04	1.0854n	9.9002	9.7563	9.0410n
422	5155	5*	A	30 39.70	2.197	+0.002	39 25 34.4	12.16	−0.002	1.0850n	9.9004	9.9244	9.5856n
423	5152	6*	A	30 40.75	2.776	0.000	15 30 58.8	12.16	+0.011	1.0849n	9.9004	9.7999	9.2102n
424	5153	6*	C	30 43.68	2.755	+0.006	16 32 02.8	12.16		1.0848n	9.9005	9.8077	9.2368n
425	5157	6.7	A	15 30 52.94	+2.059	. .	43 34 56.6	−12.15	+0.04	1.0844n	9.9007	9.9359	9.6207n
426	5164	7.0	C	15 31 29.72	+1.796	.	50 06 51.1	−12.10	.	1.0829n	9.9016	9.9494	9.6657n
427	R. C. 3416	6.8	C	31 37	2.2	.	40 12 54.0	12.09	. .	1.0826n	9.9018	9.9276	9.5904n
428	XV, 142	6.7*	C	32 55	2.6	.	24 55 56.6	12.00	−0.05	1.0793n	9.9037	9.8640	9.4020n
429	5168	5*	A	33 20.29	2.147	+0.007	40 45 41.3	11.97	+0.032	1.0782n	9.9042	9.9306	9.5909n
430	5175	6.8	B	15 34 08.55	+2.032		44 00 45.1	−11.92	.	1.0762n	9.9054	9.9399	9.6159n
431	5177	6.5*	B	15 34 16.11	+1.909	+0.011	47 12 38.0	−11.91	−0.13	1.0759n	9.9055	9.9170	9.6393n
432	Gr. 2260	6*	C	34 20	1.5	. . .	54 55 08.3	11.90	.	1.0757n	9.9056	9.9580	9.6865n
433	5178	4*	A	34 40.25	2.258	+0.001	37 02 33.2	11.88	−0.047	1.0748n	9.9061	9.9199	9.5526n
434	5181	6.5*	B	34 55.16	1.748		50 49 54.5	11.86	−0.04	1.0742n	9.9065	9.9538	9.6615n
435	R. C. 3431	8.0	C	15 35 14	+2.1		43 06 06.5	−11.84		1.0734n	9.9069	9.9386	9.6058n
436	5180	6*	A	15 35 14.29	+2.753	+0.002	16 25 44.8	−11.84	0.00	1.0734n	9.9069	9.8092	9.2227n
437	5185	6.5*	B	35 54.46	2.816	0.00	13 14 59.5	11.79	−0.020	1.0716n	9.9078	9.7837	9.1297n
438	5187	5.4*	A	35 58.62	2.676	−0.005	20 04 27.8	11.79	−0.022	1.0714n	9.9079	9.8358	9.3049n
439	5189	6*	A	36 17.29	2.701	−0.009	18 51 49.2	11.77	+0.035	1.0706n	9.9084	9.8276	9.2781n
440	XV, 168	6.8	C	15 37 14	+0.6	.	66 11 50.7	−11.70	−0.11	1.0681n	9.9097	9.9629	9.7274n
441	5192	4*	A	15 37 29.64	+2.525	−0.005	26 41 33.9	−11.68	+0.026	1.0675n	9.9100	9.8767	9.4177n
442	5203	6*	A	39 01.44	2.723	0.002	17 39 31.5	11.57	+0.009	1.0634n	9.9121	9.8203	9.2432n
443	5204	6*	B	39 03.66	2.364	0.003	32 54 41.8	11.57	−0.013	1.0633n	9.9121	9.9074	9.4962n
444	5210	6.5*	A	39 26.71	1.633	−0.010	52 45 21.9	11.54	+0.02	1.0622n	9.9126	9.9608	9.6610n
445	5216	3.4*	A	15 40 25.15	+2.761	+0.007	15 48 52.1	−11.47	−0.033	1.0596n	9.9139	9.8068	9.1929n
446	5219	7.1	A	15 40 39.00	+2.759	+0.001	15 55 00.8	−11.46	+0.003	1.0590n	9.9142	9.8078	9.1950n
447	5223	6*	B	41 29.09	2.787	0.000	14 30 08.3	11.39	+0.05	1.0567n	9.9153	9.7967	9.1532n
448	D.M.58°,1591	7.1	C	42 06	1.2	. .	58 49 21.5	11.35	. .	1.0550n	9.9161	9.9684	9.6851n
449	XV, 176	7.0	C	42 24	2.8		14 10 43.5	11.33	−0.10	1.0542n	9.9165	9.7943	9.1411n
450	XV, 179	7.0	C	15 42 58	+2.8		13 06 30.1	−11.29	.	1.0526n	9.9173	9.7854	9.1061n
451	5234	4*	A	15 43 06.79	+2.701	−0.002	18 31 44.8	−11.28	−0.094	1.0522n	9.9174	9.8288	9.2522n
452	Gr. 2278	7.0	B	43 19.31	1.178		59 42 05.6	11.25	0.05	1.0516n	9.9177	9.9700	9.6857n
453	5236	Var.	B	43 25.40	2.469		28 32 28.2	11.25	−0.02	1.0513n	9.9178	9.8902	9.4284n
454	R. C. 3453	6.5	C	43 36	1.4	. .	55 51 28.3	11.24		1.0508n	9.9181	9.9680	9.6665n
455	XV, 183	6.7*	C	15 43 42	+2.8	.	12 56 26.2	−11.23	+0.03	1.0506n	9.9182	9.7842	9.0985n

(398) Proper motion from Argelander.
(433) = B. A. C. 5178. The south following star. The companion is −0^s.48 + 4″.2 in A. R. and Decl. respectively.
(453) Maximum, 6^{m*}; minimum, 13^{m*}.

Cat. No.	Number and Catalogue.	Mag.	Class.	Right ascension, 1875.0.	Annual precession.	Proper motion.	Declination, 1875.0.	Annual precession.	Proper motion.	Log. a'.	Log. b'.	Log. c'.	Log. d'.
				h. m. s.			° ′ ″						
456	5244	4.5*	A	15 44 21.10	+2.519	—0.006	26 27 08.0	—11.19	—0.077	1.0487n	9.9190	9.8798	9.3954n
457	5248	5*	C	44 36.80	1.440	. .	55 45 36.0	11.17	.	1.0480n	9.9193	9.9688	9.6632n
458	5249	6.5*	AA	44 45.92	0.892	+0.008	62 59 10.5	11.16	—0.064	1.0476n	9.9196	9.9719	9.6952n
459	5252	5*	B	45 46.59	2.635	—0.001	21 21 18.4	11.08	+0.018	1.0447n	9.9208	9.8498	9.3038n
460	5259	5.4*	A	15 46 31.28	+2.259	—0.002	36 02 46.4	—11.03	—0.366	1.0426n	9.9218	9.9244	9.5101n
461	R. C. 3462	7.3	C	15 46 43	+2.0	. .	42 56 27.5	—11.02	. . .	1.0420n	9.9220	9.9479	9.5731n
462	5262	6.7*	B	47 22.85	2.801	—0.009	13 35 22.4	10.97	—0.525	1.0401n	9.9228	9.7913	9.1089n
463	XV, 206	6.7*	C	47 52	2.7	. .	16 26 53.7	10.93	.	1.0387n	9.9234	9.8153	9.1885n
464	5271	5.4*	B	48 21.17	2.032	+0.036	42 48 08.4	10.89	+0.61	1.0372n	9.9240	9.9488	9.5672n
465	5273	6.5	C	15 49 03.98	+2.648	—0.007	20 40 44.0	—10.84	+0.05	1.0351n	9.9249	9.8470	9.2809n
466	5279	6*	B	15 49 22.26	+1.390	.	56 11 48.9	—10.82	+0.08	1.0342n	9.9252	9.9736	9.6516n
467	XV, 215	6*	C	50 04	2.7		18 59 16.2	10.77	.	1.0322n	9.9261	9.8355	9.2424n
468	5287	6.5*	B	50 27.94	2.000	.	43 30 12.5	10.74	+0.052	1.0310n	9.9266	9.9523	9.5667n
469	5284	4.3*	A	50 40.79	2.746	+0.023	16 04 16.0	10.72	—1.272	1.0304n	9.9268	9.8135	9.1704n
470	5295	6*	A	15 51 14.74	+2.177	+0.004	38 18 32.4	—10.68	+0.077	1.0286n	9.9275	9.9371	9.5188n
471	5298	6*	B	15 51 18.25	+2.018	+0.002	42 55 50.4	—10.68	0.00	1.0285n	9.9276	9.9514	9.5595n
472	5293	6.5*	A	51 28.68	2.773	.	14 46 27.8	10.67	+0.10	1.0280n	9.9278	9.8031	9.1324n
473	5302	4*	A	52 24.81	2.487	—0.002	27 14 28.1	10.60	—0.062	1.0251n	9.9289	9.8890	9.3836n
474	5307	6*	A	53 24.39	1.157		59 16 21 7	10.52	. .	1.0221n	9.9301	9.9792	9.6542n
475	5310	6.5*	A	15 54 20.63	+2.211		36 59 58.3	—10.45	+0.03	1.0192n	9.9312	9.9345	9.4964n
476	5313	5*	A	15 54 49.47	+1.433	—0.024	55 06 12.7	—10.42	+0.103	1.0177n	9.9317	9.9773	9.6294n
477	5316	6*	C	55 31.51	1.696	.	50 14 18.8	10.36	. .	1.0155n	9.9325	9.9711	9.5991n
478	5315	6.5*	A	55 37.30	2.695	—0.004	18 09 55.7	10.36	+0.158	1.0152n	9.9326	9.8320	9.2069n
479	5319	6.5*	A	56 15.96	2.307	0.010	33 40 54.3	10.31	—0.784	1.0132n	9.9334	9.9226	9.4550n
480	5321	5.4*	A	15 56 26.10	+2.403	—0.007	30 12 07.3	—10.29	—0.022	1.0126n	9.9336	9.9067	9.4121n
481	5322	5.4*	A	15 56 54.89	+2.580	+0.004	23 09 10.0	—10.26	+0.019	1.0111n	9.9341	9.8673	9.3035n
482	5336	6*	A	58 43.57	2.202	.	36 58 40.0	10.12	.	1.0053n	9.9361	9.9374	9.4824n
483	5341	6.7*	C	58 54.15	1.524	.	53 15 48.7	10.11	—0.06	1.0047n	9.9363	9.9785	9.6064n
484	5338	5.4*	A	58 54.30	1.859	+0.005	46 23 04.3	10.11	—0.082	1.0047n	9.9363	9.9659	9.5623n
485	5348	4.3*	AA	15 59 32.94	+1.154	—0.041	58 53 58.6	—10.06	+0.339	1.0026n	9.9370	9.9844	9.6331n
486	5344	7.5	B	15 59 54.21	+2.861	—0.003	10 16 34.0	—10.03	+0.02	1.0014n	9.9374	9.7645	8.9507n
487	D.M.59°,1698	7.2	C	16 1 22	1.1	. .	59 25 52.6	9.92	.	0.9966n	9.9390	9.9863	9.6295n
488	5359	6*	A	1 39.53	2.861	—0.001	10 13 39.6	9.90	—0.014	0.9956n	9.9393	9.7645	8.9428n
489	5361	7.3	A	2 08.15	2.857	0.009	10 24 57.5	9.86	0.030	0.9940n	9.9398	9.7665	8.9491n
490	5367	5.6*	A	16 2 26	+2.707	—0.005	17 22 52.8	— 9.84	—0.014	0.9930n	9.9402	9.8289	9.1662n
491	5368	7.0	A	16 2 26.30	+2.706	—0.005	17 23 23.2	— 9.84	—0.014	0.9930n	9.9402	9.8290	9.1664n
492	Gr. 2309	7.0	C	2 40	1.0	.	60 22 58.9	9.82	. .	0.9923n	9.9404	9.9878	9.6293n
493	5376	6.5	A	3 08.49	2.702	—0.003	17 32 20.0	9.79	—0.019	0.9906n	9.9409	9.8304	9.1676n
494	5385	5.4*	A	4 24.10	2.195	0.003	36 48 34.7	9.69	+0.326	0.9864n	9.9422	9.9405	9.4617n
495	5388	4*	A	16 4 49.73	+1.889	—0.010	45 15 48.8	— 9.66	+0.039	0.9849n	9.9427	9.9675	9.5342n
496	5392	6*	B	16 5 49.20	+2.712	0.000	16 59 25.9	— 9.58	0.00	0.9814n	9.9437	9.8271	9.1450n
497	5406	6.5*	A	5 59.24	0.143	. . .	68 08 22.3	9.57	+0.06	0.9809n	9.9439	9.9900	9.6463n
498	5399	6*	B	6 18.86	2.554	—0.001	23 49 09.1	9.54	—0.02	0.9797n	9.9442	9.8763	9.2834n
499	5400	6.7*	B	6 21.14	1.929	+0.013	44 09 12.7	9.54	—0.324	0.9796n	9.9443	9.9657	9.5204n
500	5415	6.7*	B	16 6 36.11	+1.169	.	58 15 50.3	— 9.52	0.00	0.9787n	9.9445	9.9897	9.6062n
501	5411	6*	B	16 7 13.92	+2.191	. .	36 44 56.5	— 9.47	. .	0.9765n	9.9452	9.9421	9.4513n
502	5410	6.7	B	7 28.79	2.780	+0.012	13 51 45.6	9.45	—0.406	0.9756n	9.9454	9.8011	9.0529n
503	5417	6.7*	B	7 39.39	1.983	. .	42 41 44.9	9.44	.	0.9750n	9.9456	9.9624	9.5041n
504	5422	6.9	A	9 07.72	2.824	0.000	11 48 31.2	9.33	—0.06	0.9697n	9.9471	9.7824	8.9786n
505	5426	6.7*	A	16 9 56.29	+2.660	—0.004	19 07 30.5	— 9.26	—0.082	0.9668n	9.9479	9.8454	9.1800n
506	5432	6.5*	A	16 9 59.80	+2.266	—0.023	34 10 34.9	— 9.26	. .	0.9666n	9.9479	9.9331	9.4140n
507	5428	7.5	A	10 06.57	2.825	0.009	11 44 13.2	9.25	+0.047	0.9662n	9.9480	9.7820	8.9724n
508	5434	7.0	A	10 56.91	2.556	—0.002	23 26 05.6	9.19	—0.017	0.9631n	9.9489	9.8760	9.2605n
509	5440	6.5*	A	11 44.42	2.399	+0.005	29 27 38.6	9.12	—0.03	0.9602n	9.9496	9.9116	9.3499n
510	Gr. 2326	6*	C	16 11 58	+0.2		67 27 42.1	— 9.11	. .	0.9593n	9.9499	9.9961	9.6125n
511	5444	7.5	A	16 12 33.15	+2.542	.	23 54 48.6	— 9.06	+0.035	0.9571n	9.9504	9.8794	9.2628n
512	Gr. 2325	7.0	C	12 44	1.5		53 32 54.3	9.05	—0.09	0.9564n	9.9506	9.9893	9.5597n
513	5448	6.5	A	13 12.90	2.483	. . .	26 12 08.8	9.01	+0.005	0.9547n	9.9510	9.8885	9.2975n
514	5453	8.0	B	13 52.08	0.296	+0.010	66 41 12.9	8.96	—0.025	0.9522n	9.9517	9.9971	9.6130n
515	5452	6.7*	B	16 14 39.02	+2.601	.	21 26 09.2	— 8.90		0.9492n	9.9524	9.8642	9.2099n
516	5459	6*	A	16 15 10.31	+0.989	.	60 03 30.5	— 8.86		0.9472n	9.9529	9.9974	9.5828n
517	5460	6*	C	15 38.48	2.063	. . .	40 00 31.4	8.82	. .	0.9454n	9.9533	9.9589	9.4514n
518	5461	6.7*	B	15 41.82	1.673	. .	49 20 16.5	8.81	. . .	0.9452n	9.9534	9.9841	9.5230n
519	5463	3.4*	A	15 59.02	1.800	—0.001	46 36 43.1	8.79	+0.030	0.9441n	9.9536	9.9783	9.5033n
520	5466	3.4*	AA	16 16 24.36	+2.647	—0.003	19 26 53.2	— 8.76	+0.045	0.9424n	9.9540	9.8504	9.1626n

(484) A. R. uncertain. (485) A. R. not so sure as declination. (490) B. A. C. 5367. Magnitude 5.5 in D. M.
(502) 5410. Middle point of the double; Dist. 3″.0. (503) A. R. uncertain.

Cat. No.	Number and Catalogue.	Mag.	Class.	Right ascension, 1875.0.	Annual precession.	Proper motion.	Declination, 1875.0.	Annual precession.	Proper motion.	Log. a'.	Log. b'.	Log. c'.	Log. d'.
				h. m. s.	s.	s.	° ′ ″	″	″				
521	5473	5*	A	16 17 13.65	+2.342	—0.006	31 11 00.6	— 8.70	+0.126	0.9392*n*	9.9548	9.9231	9.3512*n*
522	5479	5.2	B	17 39.08	2.255	.	34 05 40.4	8.66	—0.03	0.9375*n*	9.9552	9.9370	9.3840*n*
523	5480	5.3	B	17 46.66	2.258	.	33 59 43.7	8.65	+0.03	0.9370*n*	9.9552	9.9366	9.3824*n*
524	5484	6.7*	A	18 08.60	2.299	+0.003	32 37 33.7	8.62	+0.01	0.9356*n*	9.9556	9.9305	9.3641*n*
525	5490	5*	A	16 19 38.82	+2.762	+0.002	14 19 21.8	— 8.50	—0.031	0.9295*n*	9.9570	9.8092	9.0207*n*
526	5497	7.0	B	16 20 55.24	+1.858	. .	44 58 34.6	— 8.40	+0.03	0.9244*n*	9.9581	9.9771	9.4715*n*
527	5496	6.5*	A	20 56.98	2.134	+0.001	37 40 47.5	8.40	—0.014	0.9242*n*	9.9581	9.9535	9.4083*n*
528	5499	6.5*	C	21 20.30	1.484	. .	52 34 30.0	8.37	. . .	0.9226*n*	9.9584	9.9936	9.5204*n*
529	5502	6.5*	A	21 41.41	1.303	+0.005	55 29 23.8	8.34	—0.013	0.9212*n*	9.9587	9.9979	9.5350*n*
530	5503	6.9	B	16 21 50.28	+1.515	.	52 00 01.5	— 8.33		0.9206*n*	9.9589	9.9930	9.5149*n*
531	5514	6.5*	B	16 22 06.36	—0.166	0.00	69 23 54.5	— 8.31	0.00	0.9194*n*	9.9591	0.0020	9.5886*n*
532	5509	6.5	C	22 08.15	—0.784	. .	61 58 51.6	8.30	. .	0.9193*n*	9.9591	0.0032	9.5630*n*
533	5512	3.2*	A	22 18.17	+0.801	+0.005	61 47 50.8	8.29	+0.058	0.9186*n*	9.9593	0.0032	9.5616*n*
534	5504	7.3	B	22 23.57	2.730	.	15 37 49.8	8.28		0.9182*n*	9.9594	9.8216	9.0465*n*
535	5507	7.5		16 22 42.69	+2.728	.	15 42 37.4	— 8.26		0.9168*n*	9.9597	9.8225	9.0472*n*
536	5515	6.7*		16 23 12.57	+2.280	—0.002	32 58 43.5	— 8.22	0.00	0.9148*n*	9.9599	9.9347	9.3485*n*
537	5523	Var.	B	24 32.31	1.964	+0.004	42 09 28.8	8.11	+0.04	0.9092*n*	9.9612	9.9710	9.4338*n*
538	5525	2.3*	A	24 50.82	2.583	—0.006	21 45 48.2	8.09	—0.02	0.9078*n*	9.9614	9.8706	9.1748*n*
539	5527	6*	B	25 08.01	2.607	.	20 45 15.1	8.07	.	0.9066*n*	9.9617	9.8634	9.1539*n*
540	Gr. 2351	6.2	C	16 25 32	+1.5	. .	51 40 54.9	— 8.03	.	0.9049*n*	9.9620	9.9947	9.4974*n*
541	5530	6.5	A	16 25 52.55	+2.564	. .	22 27 56.8	— 8.01	.	0.9034*n*	9.9623	9.8758	9.1834*n*
542	5529	8.5	C	25 54.57	2.817	.	11 41 39.9	8.00		0.9033*n*	9.9623	9.7858	8.9079*n*
543	5535	6.7*	C	26 40.33	1.647	.	49 14 03.7	7.94	.	0.8999*n*	9.9629	9.9907	9.4771*n*
544	Gr. 2354	6.8	B	26 43.44	1.696	—0.015	48 13 56.9	7.94	—0.282	0.8997*n*	9.9630	9.9886	9.4702*n*
545	5532	5.6*	A	16 26 45.36	+2.816	—0.013	11 45 29.0	— 7.94	—0.071	0.8996*n*	9.9630	9.7867	8.9066*n*
546	5534	7.1	A	16 26 49.30	+2.250	—0.001	33 46 58.1	— 7.93	+0.01	0.8993*n*	9.9631	9.9402	9.3422*n*
547	5537	7.0	B	27 38.29	+2.840	.	10 38 04.0	7.87	.	0.8956*n*	9.9637	9.7754	8.8596*n*
548	5545	5*	A	28 14.06	—0.142	—0.005	69 02 18.4	7.82	0.038	0.8930*n*	9.9642	0.0065	9.5611*n*
549	5541	6.9	A	28 36.84	+2.338	—0.006	30 45 44.6	7.79	—0.03	0.8913*n*	9.9645	9.9264	9.2980*n*
550	5546	6.7*	C	16 29 19.95	+2.095		38 20 58.5	— 7.73		0.8880*n*	9.9651	9.9604	9.3786*n*
551	5549	6.8	B	16 29 39.20	+1.579	.	50 24 19.9	— 7.70	—0.04	0.8866*n*	9.9653	9.9945	9.4712*n*
552	5552	4.5*	A	30 04.43	1.931	+0.001	42 41 45.2	7.67	+0.036	0.8846*n*	9.9657	9.9756	9.4138*n*
553	5560	6*	B	30 39.75	0.832		61 05 08.1	7.62	—0.03	0.8820*n*	9.9661	0.0084	9.5220*n*
554	5559	7.0	B	30 56.04	1.459	.	52 29 50.3	7.60	.	0.8807*n*	9.9663	9.9993	9.4780*n*
555	XVI, 146	6.8		16 31 22	+0.6		63 06 50.6	— 7.56	.	0.8787*n*	9.9667	0.0096	9.5268*n*
556	5563	6.0	B	16 32 02.42	+2.763		13 56 30.8	— 7.51	—0.04	0.8756*n*	9.9672	9.8092	8.9553*n*
557	5568	6.7	C	32 32.48	1.747	.	46 52 02.8	7.47	0.03	0.8732*n*	9.9676	9.9885	9.4342*n*
558	5574	5.3	A	33 14.05	1.414	—0.002	53 09 07.4	7.41	+0.025	0.8699*n*	9.9681	0.0016	9.4710*n*
559	5575	5.0	A	33 16.50	1.412	—0.003	53 10 35.2	7.41	0.02	0.8697*n*	9.9681	0.0017	9.4709*n*
560	5587	6.7*	A	16 35 02.16	+2.794	.	12 38 22.2	— 7.27	+0.02	0.8612*n*	9.9694	9.7975	8.8991*n*
561	XVI, 161	7.3	C	16 35 08	+1.6	. .	49 06 34.6	— 7.26	—0.08	0.8607*n*	9.9695	9.9951	9.4371*n*
562	5596	5*	A	35 21.26	1.628	—0.004	49 10 24.6	7.24	+0.01	0.8597*n*	9.9697	9.9953	9.4364*n*
563	5599	6.5*	C	35 28.92	1.204		56 15 38.6	7.23	+0.08	0.8590*n*	9.9698	0.0072	9.4768*n*
564	5601	6.7*	B	35 39.76	0.588		63 19 28.0	7.21	—0.12	0.8582*n*	9.9699	0.0122	9.5071*n*
565	5597	6*	B	16 35 49.70	+2.487	.	25 06 04.4	— 7.20	. .	0.8573*n*	9.9700	9.8970	9.1828*n*
566	5602	6.7*	A	16 36 32.52	+2.430	. .	27 09 32.8	— 7.14	—0.05	0.8538*n*	9.9705	9.9099	9.2110*n*
567	5604	3.2*	AA	36 34.53	2.296	—0.032	31 49 49.9	7.14	+0.041	0.8536*n*	9.9706	9.9352	9.2736*n*
568	5617	3.4*	A	38 36.69	2.050	+0.006	39 09 40.0	6.97	—0.085	0.8434*n*	9.9720	9.9678	9.3416*n*
569	5615	7.7	A	38 36.95	2.135	.	36 44 42.3	6.97	. .	0.8434*n*	9.9720	9.9584	9.3181*n*
570	5619	6.5*	B	16 39 15.12	+2.216		34 16 13.2	— 6.92	+0.06	0.8401*n*	9.9725	9.9480	9.2885*n*
571	5620	6*	A	16 39 42.88	+2.712	.	15 58 39.4	— 6.88	—0.07	0.8377*n*	9.9728	9.8297	8.9753*n*
572	XVI, 194	7.2	C	39 43	0.7	.	62 32 42.1	6.88	.	0.8377*n*	9.9728	0.0143	9.4836*n*
573	5628	5.6*	A	40 03.37	0.398		64 49 34.2	6.85	—0.01	0.8359*n*	9.9730	0.0149	9.4904*n*
574	5624	7.2	A	40 06.71	2.386		28 35 16.0	6.85	+0.03	0.8356*n*	9.9731	9.9194	9.2133*n*
575	5629	6.3	C	16 40 25	+1.213		55 55 14.4	— 6.82	+0.09	0.8340*n*	9.9733	0.0094	9.4501*n*
576	5634	7.3	B	16 42 13.44	+2.818		11 21 16.0	— 6.68	. .	0.8245*n*	9.9745	9.7861	8.8165*n*
577	Rü. 5552	5.9	C	42 23	2.8	. .	13 48 51.1	6.66	. .	0.8236*n*	9.9746	9.8106	8.8994*n*
578	5643	5*	AA	42 55.68	1.127	+0.006	57 00 20.8	6.62	+0.056	0.8207*n*	9.9750	0.0120	9.4421*n*
579	R. C. 3604	6.7	C	43 03	1.2		55 32 25.4	6.61	—0.09	0.8200*n*	9.9750	0.0105	9.4340*n*
580	D.M.13°,3228	7.3	C	16 43 13	+2.8		13 06 09.0	— 6.59	.	0.8191*n*	9.9752	9.8039	8.8724*n*
581	5644	6.7*	B	16 43 19.80	+1.915		42 27 45.4	— 6.58	—0.03	0.8185*n*	9.9752	9.9813	9.3457*n*
582	5647	6*	B	43 48.42	2.768	.	13 28 51.5	6.54	.	0.8159*n*	9.9755	9.8077	8.8813*n*
583	5658	6*	B	44 17.50	1.222	. .	55 37 55.7	6.50	. . .	0.8132*n*	9.9759	0.0110	9.4277*n*
584	5652	6.7*	A	44 23.57	2.336	—0.005	30 10 49.3	6.50	+0.068	0.8126*n*	9.9759	9.9298	9.2118*n*
585	5667	5*	B	16 45 34.54	+1.750	—0.001	46 12 07.1	— 6.40	—0.07	0.8060*n*	9.9767	9.9932	9.3623*n*

(533) No. 381 = B. A. C. 5512 (η Draconis). Mr. Rogers has since investigated the precession of this star in A. R. and finds 0s.000.
(537) 5523. Maximum magnitude, 4m.9; minimum, 6m.2. (559) This star's A. R. is very uncertain.

Cat. No.	Number and Catalogue.	Mag.	Class.	Right ascension, 1875.0.	Annual precession.	Proper motion.	Declination, 1875.0.	Annual precession.	Proper motion.	Log. a'.	Log. b'.	Log. c'.	Log. d'.
				h. m. s.			° ′ ″						
586	5666	6*	A	16 45 46.27	+2.339	. .	30 01 16.1	— 6.38	+0.008	0.8049n	9.9768	9.9294	9.2020n
587	5674	Var.	A	46 23.39	2.727	+0.001	15 11 07.9	6.33	0.007	0.8014n	9.9772	9.8242	8.9175n
588	5677	5.6*	A	46 34.33	2.483	. .	24 52 04.4	6.32	+0.002	0.8004n	9.9773	9.8992	9.1220n
589	5686	7.8	C	47 41.08	2.716	. .	15 36 56.2	6.22	. . .	0.7940n	9.9780	9.8285	8.9219n
590	5692	4.5*	A	16 48 05.60	+2.838	−0.004	10 22 22.1	— 6.19	−0.043	0.7916n	9.9783	9.7767	8.7448n
591	5693	6.5*	A	16 48 13.59	+2.278	−0.008	31 54 35.2	— 6.18	−0.02	0.7908n	9.9783	9.9401	9.2118n
592	XVI, 240	6.3	C	49 30	2.8	.	13 49 25.4	6.07		0.7833n	9.9791	9.8123	8.8594n
593	75 Heis Her.	6.5	C	49 32	2.6	. .	21 09 40.9	6.07	. .	0.7831n	9.9791	9.8743	9.0384n
594	Gr. 2389	6.8	B	49 35.47	1.881	+0.015	43 02 28.5	6.06	−0.298	0.7828n	9.9792	9.9857	9.3147n
595	5702	5.6*	A	16 49 52.52	+2.641	−0.009	18 38 04.1	— 6.04	+0.018	0.7811n	9.9794	9.8548	8.9834n
596	5703	6.7*	A	16 49 55.22	+2.451	. .	25 56 00.4	— 6.04	−0.01	0.7808n	9.9794	9.9070	9.1194n
597	5706	6.7*	B	50 43.72	1.715	. . .	46 44 32.1	5.97	. .	0.7759n	9.9798	9.9968	9.3360n
598	5714	6.7*	A	52 23.19	2.460	.	25 32 50.1	5.83	+0.008	0.7657n	9.9808	9.9053	9.0983n
599	5717	6.7*	B	52 19.75	0.805	. .	60 33 46.4	5.82	.	0.76.1n	9.9808	0.0197	9.4039n
600	5716	6.8	B	16 52 58.58	+2.712	. .	15 38 30.8	— 5.78	+0.14	0.7620n	9.9812	9.8300	8.8906n
601	5728	7.2	B	16 53 31.50	+0.631	−0.051	62 17 56.3	— 5.73	−0.037	0.7585n	9.9815	0.0212	9.4035n
602	5734	7.0	C	55 06.21	0.599	.	62 33 43.8	5.60	. .	0.7484n	9.9824	0.0220	9.3944n
603	5740	5*	A	55 20.67	0.276	+0.040	65 19 33.1	5.58	+0.048	0.7468n	9.9825	0.0228	9.4031n
604	5731	3.4*	A	55 30.46	2.296	−0.002	31 06 42.2	5.57	+0.03	0.7457n	9.9826	9.9384	9.1568n
605	84 Heis Her.	6*	C	16 55 42	+2.5	. .	22 49 05.8	— 5.55	.	0.7445n	9.9827	9.8877	9.0309n
606	5745	6.7	A	16 55 48.61	+0.287	+0.003	65 13 46.2	— 5.54	+0.041	0.7440n	9.9827	0.0230	9.4000n
607	5732	6.2	B	55 52.09	2.724	. .	15 08 01.6	5.54	. .	0.7434n	9.9828	9.8259	8.8580n
608	5747	5*	A	56 59.54	2.211	+0.003	33 45 01.9	5.44	+0.002	0.7359n	9.9834	9.9521	9.1785n
609	5752	6.7*	A	57 04.02	1.099	. .	56 52 21.5	5.44	+0.02	0.7354n	9.9834	0.0184	9.3562n
610	5749	5.6*	A	16 57 24.25	+2.744	.	14 16 24.8	— 5.41	−0.043	0.7331n	9.9836	9.8181	8.8229n
611	5753	6.4	B	16 57 54.60	+2.755	−0.004	13 47 04.0	— 5.37	−0.030	0.7297n	9.9838	9.8135	8.8046n
612	5757	6.6	C	58 12.78	2.756	−0.001	13 44 56.0	5.34	0.164	0.7276n	9.9840	9.8133	8.8014n
613	5763	6.5	B	59 01.09	2.148	+0.007	35 35 30.5	5.27	−0.05	0.7221n	9.9844	9.9611	9.1848n
614	Arg. 185	6.6	C	59 05	1.7	. .	47 13 47.8	5.27		0.7216n	9.9845	0.0013	9.2852n
615	XVI, 292	6*	C	16 59 15	+2.6	. . .	19 46 24.9	— 5.25	. .	0.7204n	9.9846	9.8662	8.9476n
616	5765	5*	A	16 59 34.92	+2.775	+0.005	12 54 50.7	— 5.23	+0.005	0.7181n	9.9847	9.8053	8.7652n
617	XVI, 298	6.8	C	17 0 18	2.8	. .	10 37 27.4	5.16	. .	0.7130n	9.9851	9.7805	8.6766n
618	93 Heis Her.	6*	B	1 00.84	2.542	. .	22 15 18.6	5.10	. .	0.7079n	9.9855	9.8853	8.9341n
619	5775	6*	B	1 16.50	1.823		43 58 59.0	5.08	. .	0.7060n	9.9856	9.9930	9.2455n
620	5776	6.7*	B	17 1 30.71	+1.585	. .	48 58 37.3	— 5.06	−0.10	0.7043n	9.9857	0.0064	9.2798n
621	5777	7.4	B	17 2 12.92	+2.148	. .	35 29 26.5	— 5.00	−0.03	0.6992n	9.9860	9.9617	9.1609n
622	5785	5.4*	A	2 44.64	1.246	−0.012	54 38 08.0	4.96	+0.076	0.6953n	9.9863	0.0176	9.3045n
623	A. O. 16829	7.0	C	3 20	1.1	.	56 18 00.8	4.91	+0.08	0.6909n	9.9866	0.0201	9.3088n
624	5786	6.5	A	3 23.54	2.476	.	24 39 02.9	4.90	−0.054	0.6904n	9.9866	9.9024	9.0085n
625	5788	6.5*	A	17 3 36.22	2.126	. .	36 05 55.5	— 4.88		0.6888n	9.9867	9.9647	9.1569n
626	5790	6*	A	17 3 42.11	+1.957	.	40 40 49.8	— 4.88	−0.014	0.6881n	9.9868	9.9829	9.2001n
627	5787	7.5	B	3 46.40	2.838	−0.007	10 12 13.0	4.87	0.16	0.6876n	9.9868	9.7773	8.6337n
628	XVII, 7	7.2	C	4 54	2.4	. .	26 36 47.7	4.77	. .	0.6789n	9.9873	9.9154	9.0280n
629	5797	6.7	B	5 09.24	0.957	+0.010	58 25 56.1	4.75	−0.09	0.6770n	9.9874	0.0232	9.3053n
630	5795	6.7*	B	17 5 13.13	+1.467	.	51 00 05.0	— 4.75	.	0.6765n	9.9875	0.0120	9.2648n
631	5801	6.7	B	17 5 23.82	+1.150	. .	55 55 37.8	— 4.73	.	0.6751n	9.9876	0.0204	9.2911n
632	5798	6*	A	5 52.78	2.482	+0.011	24 23 30.5	4.69	+0.052	0.6713n	9.9878	9.9013	8.9851n
633	5802	6.5*	B	6 34.29	2.824		10 44 18.1	4.63	−0.03	0.6659n	9.9881	9.7836	8.6340n
634	XVII, 30	6.7*	C	6 40	0.7		61 18 56.6	4.62	+0.05	0.6651n	9.9881	0.0261	9.3060n
635	5823	3*	A	17 8 25.71	+0.162	.	65 52 07.0	— 4.47	+0.022	0.6507n	9.9889	0.0282	9.3088n
636	5821	Var.	AA	17 8 56.87	+2.733	0.000	14 32 04.0	— 4 43	+0.033	0.6464n	9.9891	9.8227	8.7438n
637	5828	3*	A	9 53.84	2.462	−0.002	24 59 16.6	4.35	−0.160	0.6384n	9.9895	9.9062	8.9620n
638	XVII, 37	7.0	C	10 29	2.5		23 53 00.1	4.30	. .	0.6333n	9.9898	9.8988	8.9385n
639	5834	3*	A	10 41.67	2.089	. .	36 57 04.1	4.28	0.00	0.6315n	9.9899	9.9704	9.1083n
640	5840	6.5*	A	17 11 28.18	+0.504	+0.006	63 01 02.2	— 4.21	+0.03	0.6247n	9.9902	0.0287	9.2725n
641	5842	5*	A	17 12 42.47	+2.214	−0.003	33 14 09.9	— 4.11	−0.004	0.6137n	9.9907	9.9539	9.0504n
642	5841	5*	C	12 44.32	2.814	.	11 00 05.8	4.11	0.087	0.6135n	9.9907	9.7873	8.5920n
643	5847	5.4*	A	13 21.65	2.068	−0.001	37 25 24.6	4.05	+0.07	0.6077n	9.9909	9.9730	9.0893n
644	5853	6*	B	13 37.74	1.520	.	49 49 33.6	4.03		0.6053n	9.9910	0.0122	9.1862n
645	XVII, 64	6.5*	C	17 13 54	+2.3	. .	28 57 17.0	— 4.01	−0.03	0.6027n	9.9912	9.9315	8.9855n
646	Gr. 2431	6.0	C	17 14 11	+2.0		38 56 26.4	— 3.98	+0.07	0.6000n	9.9913	9.9793	9.0962n
647	Gr. 2432	6.4	C	14 34	0.7	. .	60 50 51.2	3.95	+0.04	0.5965n	9.9914	0.0284	9.2355n
648	5856	6.5*	B	14 48.35	2.640		18 11 15.6	3.93		0.5943n	9.9915	9.8563	8.7848n
649	Gr. 2433	6.7*	C	14 59	0.7		60 48 11.8	3.91	−0.03	0.5926n	9.9916	0.0285	9.2314n
650	XVII, 71	6*	C	17 15 04	+2.4	.	25 39 58.3	— 3.91		0.5918n	9.9916	9.9116	8.9262n

(587) Maximum magnitude, 6.4*; minimum, 12.5*.
(622) No. 447 = B. A. C. 5785 (μ Draconis), middle point between the two stars.
(636) Maximum magnitude, 3.1*; minimum, 3.9*.

Cat. No.	Number and Catalogue.	Mag.	Class.	Right ascension, 1875.0.	Annual precession.	Proper motion.	Declination, 1875.0.	Annual precession.	Proper motion.	Log. a'.	Log. b'.	Log. c'.	Log. d'.
				h. m. s.			° ′ ″						
651	5860	6.5*	A	17 15 45.29	+2.470	. .	24 37 30.3	— 3.85	. .	0.5852n	9.9918	9.9049	8.9028n
652	5863	5.6*	A	15 58.97	2.231	+0.011	32 37 47.5	3.83	—1.036	0.5829n	9.9919	9.9517	9.0125n
653	XVII, 78	7.7	C	16 33	2.8	. . .	10 19 03.2	3.78	. .	0.5774n	9.9922	9.7802	8.5283n
654	5871	6.5*	A	16 49.34	1.694	—0.006	46 21 51.4	3.76	+0.034	0.5747n	9.9922	0.0048	9.1322n
655	5874	5.6*	B	17 17 37.50	+1.965	.	40 05 53.9	— 3.69	—0.10	0.5666n	9.9925	9.9846	9.0734n
656	5883	6*	B	17 18 52.80	+2.511	.	23 04 40.0	— 3.58	—0.048	0.5533n	9.9930	9.8948	8.8444n
657	XVII, 94	6*	C	18 55	2.7	.	15 43 16.0	3.58		0.5533n	9.9930	9.8352	8.6840n
658	XVII, 95	6.5	C	18 55	2.7	. . .	16 25 04.6	3.58	. .	0.5533n	9.9930	9.8416	8.7024n
659	5886	4*	A	19 22.35	2.070	+0.002	37 15 43.4	3.54	+0.003	0.5485n	9.9931	9.9737	9.0284n
660	Gr. 2436	6.7	C	17 19 50	+2.0		38 41 48.2	— 3.50	+0.05	0.5436n	9.9933	9.9797	9.0375n
661	XVII, 104	6.5	C	17 20 06	+2.7	. .	16 29 41.9	— 3.47	+0.04	0.5408n	9.9934	9.8424	8.6918n
662	5895	6.8	B	20 07.30	2.077	—0.002	37 03 50.6	3.47	.	0.5405n	9.9934	9.9730	9.0185n
663	5902	6.7*	C	21 12.78	1.032	.	57 07 31.1	3.38	. .	0.5286n	9.9937	0.0267	9.1516n
664	5900	6.*	A	21 25.37	2.586	. .	20 11 19.9	3.36	.	0.5263n	9.9938	9.8736	8.7621n
665	5911	6.5*	A	17 23 25.43	+1.586	—0.001	48 21 56.9	— 3.19	—0.028	0.5033n	9.9944	0.0112	9.0747n
666	5917	6.5*	B	17 24 04.63	+0.770	. .	60 09 13.5	— 3.13	+0.06	0.4956n	9.9946	0.0305	9.1316n
667	5918	6.7*	B	24 12.45	+0.894	. . .	58 45 24.0	3.12	. .	0.4940n	9.9947	0.0292	9.1238n
668	F. 2895	6.5	B	25 23.40	—0.106	—0.093	67 24 41.3	3.02	0.00	0.4795n	9.9950	0.0332	9.1427n
669	B. A. C. 5922	5.4*	A	25 41.17	+2.420	.	26 12 23.0	2.99	+0.028	0.4758n	9.9951	9.9170	8.8187n
670	5927	6*	B	17 26 11.37	+2.269		31 15 09.1	— 2.95	.	0.4694n	9.9953	9.9465	8.8823n
671	5929	6.5	C	17 26 29.67	+2.001	. .	38 58 35.7	— 2.92	. .	0.4655n	9.9953	9.9821	8.9620n
672	5931	6*	A	26 55.07	2.353	+0.002	28 29 57.7	2.88	+0.057	0.4601n	9.9955	9.9312	8.8366n
673	5937	3.2*	AA	27 36.53	1.353	—0.002	52 23 40.9	2.82	+0.004	0.4510n	9.9956	0.0208	9.0477n
674	61 Heis Oph.	6*	C	28 04	2.7	. . .	16 24 29.1	2.78		0.4448n	9.9958	9.8426	8.5936n
675	5939	6.5	B	17 28 36.57	+2.759	. .	13 14 54.5	— 2.74	—0.04	0.4374n	9.9959	9.8125	8.4954n
676	5941	2*	AA	17 29 07.92	+2.774	+0.008	12 39 09.9	— 2.69	—0.224	0.4302n	9.9960	9.8065	8.4685n
677	5944	6*	A	29 09.49	1.906	. . .	41 19 58.4	2.69	—0.09	0.4298n	9.9961	9.9913	8.9475n
678	5942	7.7	B	29 16.75	2.760	. .	13 13 19.5	2.68	. .	0.4281n	9.9961	9.8123	8.4829n
679	5950	5.2	B	29 42.92	1.159	+0.020	55 16 12.5	2.64	+0.038	0.4219n	9.9962	0.0261	9.0346n
680	5951	5.2	B	17 29 48.28	+1.160	+0.020	55 15 31.1	— 2.63	+0.028	0.4207n	9.9962	0.0261	9.0333n
681	XVII, 163	6*	C	17 30 39	+2.6	. .	21 04 39.4	— 2.56	.	0.4084n	9.9964	9.8817	8.6621n
682	5962	6*	A	31 51.33	2.278	+0.004	30 51 48.9	2.46		0.3903n	9.9967	9.9453	8.7983n
683	5967	6*	C	32 22.17	+2.470	. . .	24 23 08.5	2.41	.	0.3824n	9.9968	9.9028	8.6960n
684	5972	5.6*	A	32 27.95	—0.249	—0.005	68 12 51.9	2.40	+0.115	0.3808n	9.9969	0.0346	9.0465n
685	XVII, 183	6.7	C	17 33 13	+2.8	. .	13 23 59.9	— 2.34	+0.03	0.3689n	9.9970	9.8144	8.4317n
686	5975	6.5*	B	17 33 21.56	+1.562	+0.005	48 39 33.3	— 2.33	+0.044	0.3665n	9.9971	0.0138	8.9399n
687	5978	6.5*	A	33 42.09	+0.577	+0.038	61 58 13.5	2.30	—0.518	0.3610n	9.9971	0.0338	9.0047n
688	XVII, 220	7.9	C	34 58	—0.3	. .	68 11 48.5	2.19	—0.05	0.3396n	9.9974	0.0351	9.0052n
689	5986	6*	A	35 14.27	+2.264	.	31 16 11.7	2.16	. . .	0.3349n	9.9975	9.9478	8.7480n
690	B. A. C. 5990	3.4*	A	17 35 56.17	+1.691	0.000	46 04 25.4	— 2.10	0.00	0.3225n	9.9976	0.0074	8.8778n
691	5988	6.7*	A	17 35 57.44	+2.463	.	24 34 34.9	— 2.10	+0.048	0.3222n	9.9976	9.9075	8.6390n
692	5991	6*	B	36 22.06	2.690	.	16 00 42.8	2.06	+0.12	0.3147n	9.9977	9.8398	8.4532n
693	5994	7.8	C	36 35.25	2.461	. .	24 38 14.0	2.05		0.3107n	9.9977	9.9080	8.6285n
694	5997	6.7*	C	36 50.42	+1.808	.	43 31 58.4	2.02		0.3059n	9.9978	9.9999	8.8419n
695	XVII, 237	7.7	C	17 37 09	—0.3	. . .	68 33 34.0	— 2.00	—0.07	0.3001n	9.9978	0.0354	8.9668n
696	A. Ö. 17420	7.9	C	17 37 18	—0.3	. .	68 26 58.1	— 1.98	.	0.2973n	9.9979	0.0354	8.9637n
697	5999	6.0	A	37 20.88	+2.461	. . .	24 37 42.5	1.98	—0.10	0.2964n	9.9979	9.9080	8.6141n
698	6006	5*	AA	37 41.06	—0.362	+0.004	68 48 55.5	1.95	+0.304	0.2899n	9.9979	0.0353	8.9574n
699	6005	6*	A	38 13.77	+2.458	—0.007	24 23 00.8	1 90	+0.082	0.2792n	9.9980	9.9064	8.5928n
700	6013	6.7*	C	17 39 23.18	+1.779	.	44 08 23.7	— 1.80	.	0.2555n	9.9982	0.0022	8.7962n
701	6021	3.4*	AA	17 41 34.01	+2.369	—0.024	27 47 42.4	— 1.61	—0.746	0.2071n	9.9986	9.9287	8.5736n
702	154 Heis Her.	6.5*	C	41 37	2.6	.	17 44 41.2	1.61		0.2059n	9.9986	9.8556	8.3878n
703	Gr. 2464	6.0	C	41 44	2.0		38 55 54.7	1.60	.	0.2032n	9.9986	9.9841	8.6993n
704	159 Heis Her.	6.5*	C	43 03	2.6	. .	20 36 31.7	1.48	. .	0.1708n	9.9988	9.8792	8.4151n
705	6030	6.7*	B	17 43 22.13	+2.604	.	19 17 48.5	— 1.45	+0.04	0.1625n	9.9988	9.8687	8.3795n
706	6033	6.5*	A	17 43 45.05	+2.430	+0.001	25 39 57.2	— 1.42	—0.04	0.1524n	9.9989	9.9155	8.4869n
707	6036	6.5*	C	43 46.78	1.608	.	47 39 22.3	1.42		0.1512n	9.9989	0.0126	8.7168n
708	Rü. 6047	7.2	C	44 13	2.6		20 40 39.6	1.38		0.1399n	9.9990	9.8798	8.3856n
709	166 Heis Her.	6.5*	C	45 32	1.5	.	29 21 24.6	1.26	. .	0.1021n	9.9991	9.9382	8.4903n
710	6052	5*	B	17 46 05.11	+1.434	—0.007	50 48 41.3	— 1.22	+0.19	0.0852n	9.9992	0.0203	8.6708n
711	6056	6*	A	17 46 47.08	+1.566	+0.001	48 25 43.5	— 1.15	+0.012	0.0612n	9.9993	0.0148	8.6330n
712	Gr. 2473	6.7	C	47 10	1.9	.	40 06 17.3	1.12	. .	0.0498n	9.9993	9.9890	8.5566n
713	6062	6.7*	B	48 00.70	1.950	. . .	40 00 37.5	1.05	+0.056	0.0210n	9.9994	9.9888	8.5270n
714	Gr. 2481	6.4	C	48 33	1.7		46 40 36.2	1.00	—0.16	0.0005n	9.9995	0.0104	8.5602n
715	6068	5*	A	17 49 13.89	+1.949		40 01 57.6	— 0.93	+0.058	9.9699n	9.9995	9.9889	8.4761n

(6 8 No. 476. Proper motion from Argelander. (690) Mädler's proper motion in A. R. is seriously in error. (711) A. R. relatively uncertain.

Cat. No.	Number and Catalogue.	Mag.	Class.	Right ascension, 1875.0.	Annual precession.	Proper motion.	Declination, 1875.0.	Annual precession.	Proper motion.	Log. a'.	Log. b'.	Log. c'.	Log. d'.
				h. m. s.			° ′ ″						
716	6073	6*	AA	17 50 22.67	+2.418	+0.002	26 04 16.8	− 0.84	+0.01	9.9251n	9.9996	9.9185	8.2659n
717	172 Heis Her.	6*	C	50 36	2.5	. .	22 29 05.3	0.82		9.9150n	9.9996	9.8938	8.1954n
718	XVII, 301	6.5	C	51 07	2.6	. .	18 37 51.6	0.78	+0.03	9.8904n	9.9997	9.8636	8.0927n
719	6079	3.4*	A	51 22.10	1.022	+0.014	56 53 34.1	0.75	0.072	9.8784n	9.9997	0.0310	8.4993n
720	6082	4*	A	17 51 57.98	+2.055	.	37 16 05.8	− 0.70	+0.02	9.8469n	9.9997	9.9779	8.3269n
721	6084	4.3*	A	17 52 54.40	+2.322	+0.005	29 15 45.3	− 0.62	−0.024	9.7928n	9.9998	9.9381	8.1797n
722	6091	2.3*	AA	53 42.26	1.391	0.003	51 30 15.6	0.55	−0.031	9.7409n	9.9998	0.0222	8.3324n
723	6087	4.5*	A	53 43.30	2.294	+0.004	30 12 03.5	0.55	+0.002	9.7398n	9.9998	9.9434	8.1392n
724	6095	7.2	C	54 10.71	1.806		43 25 46.4	0.51	. .	9.7070n	9.9999	0.0010	8.2431n
725	6094	5*	B	17 54 29.51	+2.687	. .	16 45 34.3	− 0.48	+0.011	9.6829n	9.9999	9.8474	7.8406n
726	Gr. 2494	6*	C	17 55 18	+1.7		45 29 04.3	− 0.41	+0.06	9.6140n	9.9999	0.0074	8.1650n
727	XVII, 347	6.5	C	56 02	2.2	. .	33 13 10.6	0.35	.	9.5404n	9.9999	9.9594	7.9748n
728	6106	5.4*	A	56 12.00	2.542	−0.001	21 35 51.7	0.33	+0.022	9.5217n	9.9999	9.8873	7.7856n
729	6109	6.7*	B	56 21.96	1.710	.	45 30 29.1	0.32	.	9.5022n	9.9999	0.0075	8.0533n
730	6110	5*	A	17 57 02.50	+2.562	.	20 50 05.6	− 0.26	+0.016	9.4130n	0.0000	9.8815	7.6619n
731	6116	6.7	A	17 57 16.64	+2.505	−0.012	22 55 26.0	− 0.24	−0.002	9.3770n	0.0000	9.8974	7.6659n
732	R. C. 3820	6.8	C	57 48	1.6	.	48 28 00.9	0.19	. .	9.2841n	0.0000	0.0154	7.8562n
733	6129	6.7*	B	17 59 52.87	1.562		48 27 33.3	− 0.01		8.0014n	0.0000	0.0154	6.5834n
734	Rü. 6227	7.3	C	18 0 36	1.7	. . .	46 26 01.4	+ 0.05	.	8.7201	0.0000	0.0101	7.2780
735	6134	6*	A	18 0 46.06	+2.524	+0.001	22 13 32.6	+ 0.07	−0.003	8.8272	0.0000	9.8920	7.1028
736	XVII, 381	6.7	C	18 2 03	+2.8	.	13 03 20.9	+ 0.18	. .	9.2537	0.0000	9.8120	7.3055
737	6147	5*	A	2 16.83	2.282	−0.007	30 32 43.1	0.20	+0.07	9.3001	0.0000	9.9454	7.7040
738	6150	4*	A	2 39.99	2.338	+0.001	28 44 47.6	0.23	−0.006	9.3679	0.0000	9.9352	7.7478
739	6151	6*	A	2 47.17	2.417		26 04 48.2	0.24	+0.025	9.3871	0.0000	9.9187	7.7280
740	6152		A	18 2 47.17	+2.417		26 05 02.8	+ 0.24	+0.025	9.3871	0.0000	9.9188	7.7281
741	Rü. 6264	7.2	C	18 3 09	+1.7	. . .	46 15 31.9	+ 0.28	. .	9.4403	0.0000	0.0037	7.9970
742	6157	4.5*	A	3 24.68	2.563	−0.003	20 47 46.9	0.30	−0.021	9.4749	0.0000	9.8812	7.7230
743	6159	5*	A	3 29.49	2.584	+0.001	20 01 38.4	0.31	−0.011	9.4850	9.9999	9.8751	7.7174
744	6162	5.6*	C	3 42.80	1.805		43 26 51.5	0.32		9.5117	9.9999	0.0011	8.0469
745	XVIII, 23	6.5	B	18 5 18	−0.1		66 55 44.5	+ 0.46	. .	9.6662	9.9999	0.0374	8.3278
746	6177	7.0	C	18 6 02.42	+0.309	−0.009	64 12 09.0	+ 0.53	+0.04	9.7225	9.9999	0.0370	8.3747
747	201 Heis Her.	6*	C	7 11	2.2	. .	33 25 04.4	0.63	. .	9.7982	9.9998	9.9603	8.2370
748	6178	5*	A	7 11.98	2.257	+0.004	31 22 31.8	0.63	+0.02	9.7991	9.9998	9.9498	8.2134
749	6184	7.5	C	7 48.62	1.072	. .	56 14 19.6	0.68	.	9.8346	9.9998	0.0302	8.4523
750	6185	6*	A	18 7 57.91	+1.216	+0.015	54 14 59.0	+ 0.70	+0.23	9.8430	9.9997	0.0272	8.4501
751	XVIII, 31	7.0	C	18 8 43	+0.6		61 51 03.5	+ 0.76	.	9.8822	9.9997	0.0358	8.5254
752	Gr. 2529	6*	C	8 44	1.9	. .	41 06 57.5	0.76	−0.05	9.8830	9.9997	9.9963	8.3988
753	6193	6*	A	8 54.60	1.999		38 44 22.8	0.78		9.8918	9.9997	9.9840	8.3860
754	Gr. 2536	6.7	C	11 45	1.5		49 06 51.3	1.03	. .	0.0119	9.9994	0.0166	8.5883
755	6203	5.6*	A	18 11 45.45	+1.864		42 07 03.7	+ 1.03	+0.004	0.0120	9.9994	9.9964	8.5364
756	6216	6.7*	C	18 12 29.60	+1.051	.	56 32 45.1	+ 1.09		0.0384	9.9994	0.0303	8.6576
757	204 Heis Her.	6*	C	12 38	2.6	. . .	18 05 05.1	1.10	.	0.0433	9.9993	9.8588	8.2331
758	6218	6*	B	13 08.90	1.916	−0.015	40 53 18.5	1.15	+0.08	0.0608	9.9993	9.9919	8.5746
759	6224	5*	A	13 10.56	0.291	+0.054	64 21 17.8	1.15	−0.002	0.0615	9.9993	0.0365	8.7171
760	D.M.64°,1253	7.0	C	18 13 42	+0.3	. .	64 42 33.9	+ 1.20	.	0.0784	9.9992	0.0366	8.7325
761	6223	6*	A	18 14 02.11	+2.466	+0.003	24 23 43.9	+ 1.23	+0.002	0.0889	9.9992	9.9071	8.4028
762	6231	6.5*	A	15 00.64	2.535	0.004	21 54 35.7	1.31	−0.053	0.1181	9.9991	9.8892	8.3878
763	6232	6.5	A	15 02.80	2.313	0.006	29 36 48.3	1.32	0.00	0.1191	9.9991	9.9396	8.5108
764	6235	5.4*	B	15 28.88	2.102	+0.001	36 00 33.2	1.35	+0.023	0.1314	9.9990	9.9720	8.5986
765	6234	7.0	A	18 15 33.32	+2.334	. .	28 55 45.7	+ 1.36	+0.008	0.1335	9.9990	9.9357	8.5160
766	6243	6.7*	A	18 16 00.72	−0.351	+0.003	68 42 37.6	+ 1.40	−0.06	0.1461	9.9989	0.0362	8.8132
767	6237	6*	A	16 08.22	2.307	−0.001	29 48 02.6	1.41	+0.043	0.1494	9.9989	9.9406	8.5136
768	6238	5*	A	16 08.50	−2.337		28 48 42.9	1.41	0.048	0.1496	9.9989	9.9359	8.5304
769	6241	6.7*	A	16 55.91	+2.499		23 13 23.1	1.48	+0.075	0.1703	9.9988	9.8987	8.4639
770	6246	6*	B	18 17 00.48	+1.408	. .	51 17 37.1	+ 1.49	−0.04	0.1721	9.9988	0.0210	8.7623
771	6245	6*	C	18 17 17.47	+2.644	. .	17 45 54.8	+ 1.51	. . .	0.1792	9.9988	9.8558	8.3615
772	6257	6.8	A	17 42.64	−0.346	−0.008	68 41 31.5	1.55	−0.098	0.1898	9.9987	0.0360	8.8569
773	6252	6.5	B	17 59.18	+1.502		49 39 54.7	1.57	+0.02	0.1965	9.9987	0.0174	8.7764
774	6255	5*	A	18 20.88	1.535	. .	49 03 33.8	1.60	+0.07	0.2051	9.9986	0.0159	8.7811
775	6251	4*	A	18 18 22.23	+2.540	+0.014	21 42 51.8	+ 1.61	−0.265	0.2056	9.9986	9.8876	8.4717
776	6258	6.8	C	18 18 33.05	+1.411		51 14 28.6	+ 1.62	. .	0.2099	9.9986	0.0207	8.7997
777	6272	7.0	B	19 56.32	−0.124	. .	67 22 27.1	1.74	0.00	0.2411	9.9984	0.0360	8.9042
778	6268	5*	A	20 06.73	+1.976	−0.002	39 26 24.7	1.76	0.00	0.2449	9.9983	9.9859	8.7457
779	Gr. 2563	6.7	B	20 18.74	1.855		42 24 01.6	1.78		0.2493	9.9983	9.9965	8.7760
780	8 Heis Lyrae.	6.5*	C	18 21 10	+2.3	.	29 45 31.0	+ 1.85		0.2670	9.9982	9.9400	8.6606

(723) 6106. The middle point of two equal components.
(755) 6203. The A. R. of this star as given in St. is quite erroneous; I first noticed it by observations at Chicago.
(758) 6218. A. R. uncertain.
(773) 6252. A. R. uncertain.

Cat. No.	Number and Catalogue.	Mag.	Class.	Right ascension, 1875.0.	Annual precession.	Proper motion.	Declination, 1875.0.	Annual precession.	Proper motion.	Log. a'.	Log. b'.	Log. c'.	Log. d'.
				h. m. s.			° ′ ″						
781	XVIII, 83	6.5	C	18 21 27	+2.4	. .	26 23 19.1	+ 1.87	.	0.2728	9.9981	9.9197	8.6184
782	XVIII, 84	6.1	C	21 39	2.4	. .	26 22 36.4	1.89	+0.04	0.2768	9.9981	9.9196	8.6223
783	6289	5*	A	22 05.00	0.880	—0.007	58 43 43.6	1.93	+0.055	0.2854	9.9980	0.0318	8.9151
784	6300	6*	A	24 24.79	2.485		23 47 04.2	2.13		0.3288	9.9975	9.9020	8.6323
785	6311	7.2	B	18 24 58.15	+0.804	.	59 37 39.5	+ 2.18		0.3385	9.9974	0.0322	8.9722
786	6316	5.6*	A	18 25 37.39	+0.158	+0.014	65 29 10.2	+ 2.24	—0.043	0.3497	9.9973	0.0351	9.0065
787	6318	6.7*	B	25 58.70	0.819	.	59 27 58.3	2.27	. .	0.3557	9.9972	0.0329	8.9887
788	6322	6*	A	27 34.04	2.493	. .	23 31 30.4	2.40	+0.02	0.3812	9.9968	9.8999	8.6802
789	Arg. LXIII.	6.5*	B	28 03.15	2.291		30 27 41.7	2.45	.	0.3888	9.9967	9.9431	8.7916
790	Gr. 2597	6.8	C	18 28 47	+1.7		45 40 54.3	+ 2.51		0.4000	9.9966	0.0056	8.9524
791	6335	6.5	B	18 29 19.82	+1.373	.	52 01 20.6	+ 2.56	.	0.4081	9.9964	0.0217	9.0026
792	217 Heis Her.	6*	C	29 42	2.6	.	18 06 17.6	2.59		0.4135	9.9963	9.8577	8.6038
793	Gr. 2603	6.5	C	30 16	1.7	.	46 07 18.5	2.64		0.4217	9.9963	0.0066	8.9773
794	6341	6*	A	30 18.14	2.495	. . .	23 30 20.8	2.64		0.4222	9.9962	9.8994	8.7208
795	6348	5*	C	18 30 25.06	+1.035	—0.003	56 57 01.5	+ 2.65	.	0.4238	9.9962	0.0280	9.0450
796	6350	5.6*	B	18 31 06.52	+1.360		52 15 18.1	+ 2.71	.	0.4335	9.9960	0.0218	9.0294
797	6349	7.3	B	31 10.53	2.006	.	38 47 38.4	2.72	—0.015	0.4344	9.9960	9.9818	8.9292
798	XVIII, 133	6.3	C	31 22	2.8	.	11 19 05.5	2.74	.	0.4371	9.9959	9.7923	8.4278
799	A. Ö. 18414	6.9	C	31 37	1.4		51 41 00.5	2.76		0.4405	9.9959	0.0196	9.0330
800	Gr. 2615	7.3	C	18 32 05	+1.8		42 57 10.3	+ 2.80		0.4469	9.9957	9.9966	8.9779
801	6355	1*	AA	18 32 42.37	+2.012	+0.019	38 40 06.6	+ 2.85	+0.288	0.4551	9.9956	9.9810	8.9487
802	6357	6.7*	B	33 58.82	1.979		39 33 33.1	2.96	+0.03	0.4716	9.9952	9.9843	8.9735
803	6364	6.7*	C	35 31.28	1.930	.	40 49 18.2	3.10	. . .	0.4907	9.9948	9.9887	9.0040
804	XVIII, 173	6*	A	35 49.56	0.190	.	65 22 36.4	3.12	+0.06	0.4944	9.9947	0.0329	9.1508
805	6365	7.2	A	18 35 58.05	+2.030	+0.006	38 15 07.8	+ 3.13	+0.02	0.4961	9.9946	9.9788	8.9857
806	Gr. 2632	6.8	C	18 36 00	+1.4	.	52 13 51.7	+ 3.14		0.4965	9.9946	0.0197	9.0922
807	XVIII, 156	6.7	C	36 01	2 8	. . .	12 08 16.5	3.14		0.4967	9.9946	9.8006	8.5173
808	6368	7.2	B	36 05.08	1.176	+0.010	55 07 49.0	3.14	+0.05	0.4975	9.9946	0.0246	9.1094
809	XVIII, 174	6*	C	36 26	0.5		62 24 45.5	3.17		0.5016	9.9945	0.0318	9.1471
810	6373	6.8	B	18 36 53.28	+0.730	.	60 35 45.5	+ 3.21	+0.10	0.5070	9.9944	0.0306	9.1449
811	6372	6*	A	18 37 00.40	+1.378	+0.002	52 04 44.4	+ 3.22	+0.02	0.5083	9.9943	0.0192	9.1032
812	Gr. 2644	6.5	B	39 05.63	1.965		39 10 32.9	3.40	. .	0.5321	9.9937	9.9818	9.0304
813	Gr. 2646	6.8	C	39 15	1.8	.	44 48 08.2	3.42		0.5337	9.9936	0.0010	9.0795
814	6393	6*	A	39 50.60	0.528	. .	62 37 31.6	3.47	+0.03	0.5402	9.9934	0.0311	9.1864
815	6390	4.5*	A	18 40 11.85	+1.984	+0.001	39 32 25.2	+ 3.50	+0.052	0.5438	9.9933	9.9829	9.0456
816	6395	5.6*	A	18 40 12.61	+1.161	—0.001	55 24 47.9	+ 3.50	+0.014	0.5441	9.9933	0.0240	9.1575
817	6391	5.4*	A	40 14.20	1.987	+0.001	39 28 58.3	3.50	+0.064	0.5444	9.9933	9.9826	9.0456
818	6387	4*	A	40 16.97	2.581	0.002	20 25 40.9	3.51	—0.357	0.5449	9.9933	9.8752	8.7856
819	6392	4.5	A	40 28.03	2.062	0.003	37 28 31.5	3.52	+0.01	0.5468	9.9932	9.9746	9.0289
820	6394	5.5	A	18 40 29.95	+2.062	+0.002	37 27 53.5	+ 3.53	+0.01	0.5471	9.9932	9.9746	9.0291
821	Gr. 2659	6.0	C	18 40 49	+1.3	. . .	53 44 40.9	+ 3.55	.	0.5505	9.9931	0.0212	9.1549
822	6397	4*	A	41 29.97	2.643	. .	18 02 37.9	3.61	+0.116	0.5576	9.9928	9.8557	8.7465
823	6404	6*	C	42 13.29	1.916		41 18 30.9	3.67		0.5650	9.9926	9.9889	9.0825
824	P. m. 2162	8.1	C	42 32	2.8	. .	10 37 22.8	3.70	—0.48	0.5682	9.9925	9.7839	8.5317
825	6410	6.7*	A	18 42 49.88	+0.710	+0.005	60 54 57.3	+ 3.73	0.00	0.5712	9.9924	0 0292	9.2105
826	XVIII, 212	7.9	C	18 43 04	+0.6	. .	61 48 25.5	+ 3.75	.	0.5736	9.9923	0.0297	9.2166
827	Gr. 2669	6.1	C	43 26	1.7		46 10 44.2	3.78	. .	0.5772	9.9922	0.0039	9.1332
828	XVIII, 203	6*	C	43 26	2.6	.	19 11 23.0	3.78	—0.05	0.5772	9.9922	9.8649	8.7918
829	6419	6*	A	43 55.48	1.339		52 51 05.1	3.82	.	0.5820	9.9920	0.0189	9.1814
830	6421	7.0	A	18 44 15.96	+1.546		49 17 38.7	+ 3.85		0.5853	9.9919	0.0116	9.1629
831	6428	6*	B	18 44 58.39	+1.583	.	48 37 32.5	+ 3.91	+0.08	0.5921	9.9916	0.0098	9.1653
832	6426	6.3	A	45 06.77	2.230	.	32 40 12.0	3.92	—0.012	0.5935	9.9915	9.9516	9.0235
833	6427	6.5*	A	45 12.84	2.239	—0.001	32 24 29.3	3.93	—0.002	0.5944	9.9915	9.9503	9.0214
834	6429	Var.	AA	45 27.87	2.213	—0.002	33 13 07.9	3.95	+0.01	0.5968	9.9914	9.9543	9.0333
835	3 Heis. Aquil.	6*	C	18 46 18	+2.7		13 49 04.4	+ 4.02	.	0.6046	9.9911	9.8164	8.6805
836	Gr. 2687	7.2	C	18 46 56	+1.8		43 48 33.5	+ 4.08	.	0.6105	9.9908	9.9960	9.1486
837	6438	5.6	A	46 56.04	2,561		21 16 33.6	4.08	—0.009	0.6104	9.9908	9.8806	8.8680
838	Gr. 2693	6*	C	48 06	1.9	.	41 13 56.2	4.18		0.6210	9.9904	9.9872	9.1378
839	6452	6*	B	48 47.04	1.349	. . .	52 48 50.7	4.24	+0.25	0.6270	9.9901	0.0174	9.2261
840	6463	5.4*	AA	18 49 21.28	+0.877	+0.008	59 14 09.3	+ 4.28	+0.012	0.6319	9.9898	0.0259	9.2639
841	6456	6*	A	18 49 21.60	+2.094	+0.001	36 48 59.9	+ 4.29	—0.01	0.6320	9.9898	9.9698	9.1075
842	6453	4.5*	A	49 28.26	2.531	.	22 29 17.3	4.30	+0.006	0.6330	9.9898	9.8890	8.9134
843	Gr. 2701	7.0	A	49 34.94	1.864		42 44 50.3	4.30	—0.04	0.6339	9.9898	9.9919	9.1635
844	6466	4.5*	B	50 07.90	2.099	.	36 44 27.6	4.35	+0.01	0.6386	9.9895	9.9692	9.1133
845	6470	5.6*	C	18 50 07.63	+1.485		50 33 13.4	+ 4.35		0.6386	9.9895	0.0126	9.2242

(791) 6335. A. R. uncertain.
(815) 6390. The south preceding of the close pair.
(816) 6395. A. R. rather uncertain.
(817) 6391. The middle point of the close pair.
(829) 6419. The A. R. from Ay. 60, without P. M.; the star needs re-observing in that co-ordinate.
(834) 6429. Maximum magnitude, 3.5*; minimum, 4.5*.
(840) 6463. The A. R. has been but little observed of late years, and is not very sure.

Cat. No.	Number and Catalogue.	Mag.	Class.	Right ascension, 1875.0.	Annual precession.	Proper motion.	Declination, 1875.0.	Annual precession.	Proper motion.	Log. a'.	Log. b'.	Log. c'.	Log. d'.
				h. m. s.			° ′ ″						
846	6468	6.7*	A	18 50 17.70	+2.198	. .	33 48 36.5	+ 4.37	—0.016	0.6400	9.9895	9.9560	9.0832
847	6473	6*	C	50 51.92	1.919		41 26 37.7	4.41	.	0.6448	9.9892	9.9872	9.1635
848	6476	6*	C	51 29.41	1.588	.	48 42 14.1	4.47	—0.12	0.6500	9.9889	0.0081	9.2237
849	6475	Var.	AA	51 31.86	1.822	+0.004	43 46 56.4	4.47	+0.077	0.6504	9.9889	9.9946	9.1883
850	6477	6.3	C	18 51 36.10	+1.039	.	57 19 42.6	+ 4.48		0.6510	9.9889	0.0232	9.2740
851	F. 3047	7.0	C	18 51 56	+0.8	. .	59 51 31.7	+ 4.51	.	0.6537	9.9888	0.0255	9.2884
852	6480	6*	A	52 20.44	2.234	+0.013	32 44 31.3	4.54	—0.178	0.6570	9.9886	9.9503	9.0880
853	6482	6.7*	A	53 02.62	2.753	—0.002	13 44 24.2	4.60	0.051	0.6627	9.9883	9.8147	8.7363
854	6483	5*	A	53 20.43	2.760	.	13 27 27.0	4.62	0.118	0.6651	9.9881	9.8119	8.7298
855	6487	4*	AA	18 53 56.93	+2.725	—0.004	14 54 00.2	+ 4.68	—0.082	0.6700	9.9878	9.8257	8.7780
856	6491	3.4*	A	18 54 16.07	+2.243	+0.003	32 31 09.7	+ 4.70	+0.012	0.6724	9.9877	9.9486	9.1007
857	6496	6*	B	54 38.16	1.020	—0.005	57 38 58.8	4.74	—0.067	0.6753	9.9875	0.0224	9.2999
858	42 Heis Lyræ.	6*	C	54 40	2.4	. .	26 02 32.4	4.74	. .	0.6756	9.9875	9.9119	9.0159
859	6493	6*	C	54 41.20	1.961		40 30 31.6	4.74	.	0.6757	9.9875	9.9828	9.1862
860	6495	6*	C	18 54 59.76	+2.018	.	39 02 43.8	+ 4.77	.	0.6781	9.9874	9.9772	9.1753
861	6497	5.6*	A	18 55 17.94	+2.261	+0.003	31 58 18.0	+ 4.79	—0.005	0.6805	9.9872	9.9456	9.1022
862	6500	6.7*	B	55 24.69	0.990		58 03 13.2	4.80	+0.02	0.6814	9.9872	0.0226	9.3079
863	D.M.20°,4022	6.0	C	56 00	2.6		20 39 25.5	4.85		0.6858	9.9869	9.8750	8.9312
864	6508	6.7*	A	56 01.86	0.608		62 13 40.1	4.85	—0.05	0.6861	9.9869	0.0256	9.3308
865	46 Heis Lyræ.	6*	C	18 56 13	+2.4		26 06 55.9	+ 4.87	.	0.6875	9.9868	9.9120	9.0290
866	6516	7.2	C	18 57 41.25	+1.640		47 51 29.8	+ 4.99	. .	0.6985	9.9861	0.0040	9.2664
867	6520	5.6*	C	57 54.02	1.695	. .	46 45 30.2	5.01	—0.10	0.7000	9.9860	0.0011	9.2603
868	6522	6*	B	58 14.88	1.190	—0.004	55 28 47.2	5.04	—0.026	0.7026	9.9858	0.0184	9.3163
869	Y. 8113	6.7	C	58 21	2.6	.	21 05 07.9	5.05		0.7033	9.9858	9.8768	8.9572
870	6530	6.3	C	18 59 10.46	+1.412		52 04 49.6	+ 5.12	.	0.7093	9.9854	0.0126	9.3041
871	6527	6.5	A	18 59 24.00	+2.627	.	18 57 25.6	+ 5.14	+0.02	0.7109	9.9852	9.8600	8.9204
872	6528	3*	AA	59 39.83	2.757	—0.002	13 40 45.0	5.16	—0.087	0.7128	9.9851	9.8130	8.7844
873	6534	6*	B	19 0 12.14	2.278		31 33 33.1	5.21		0.7166	9.9848	9.9421	9.1332
874	Gr. 2761	7.0	C	0 20	0.8		59 56 37.7	5.22	. .	0.7175	9.9848	0.0224	9.3526
875	6543	5*	A	19 1 05.53	+2.823	.	10 52 49.5	+ 5.28	—0.027	0.7228	9.9844	9.7840	8.6966
876	XIX, 6	6.7	C	19 1 18	+0.6		62 31 10 9	+ 5.30		0.7243	9.9843	0.0236	9.3701
877	6542	6*	B	1 25.64	2.495		24 03 29.9	5.31		0.7251	9.9842	9.8972	9.0333
878	6547	6.5*	B	1 39.97	2.373	.	28 25 58.8	5.33	.	0.7268	9.9841	9.9246	9.1023
879	6551	6*	B	2 06.58	1.349	—0.003	53 12 19.3	5.37	+0.007	0.7298	9.9838	0.0134	9.3312
880	6555	7.0	B	19 2 06.82	+0.658	.	61 54 24.6	+ 5.37		0.7298	9.9838	0.0230	9.3732
881	6553	6.5*	A	19 2 41.89	+2.257	+0.009	32 18 21.9	+ 5.42	+0.042	0.7338	9.9835	9.9451	9.1595
882	6556	5*	A	2 50.50	2.139	+0.001	35 54 19.0	5.43	—0.006	0.7348	9.9835	9.9619	9.2008
883	Gr. 2770	7.0	C	3 32	2.0		38 43 52.2	5.49		0.7394	9.9831	9.9732	9.2336
884	Gr. 2774	6.9	C	3 59	2.0		38 57 24.5	5.53		0.7424	9.9828	9.9740	9.2387
885	6566	7.7	B	19 5 21.60	+1.533		50 09 46.4	+ 5.64		0.7514	9.9821	0.0064	9.3345
886	6567	7.3	B	19 5 58.90	+2.288	.	31 25 54.3	+ 5.69		0.7554	9.9817	9.9396	9.1705
887	56 Heis Lyræ.	7.7	C	6 32	2.4	.	26 04 19.9	5.74	.	0.7586	9.9815	9.9089	9.0994
888		7.5	C	6 39	2.4		26 02 33.6	5.75	.	0.7596	9.9814	9.9087	9.1000
889	6571	6*	A	6 58.36	2.300		31 04 34.1	5.78	+0.007	0.7617	9.9812	9.9375	9.1723
890	6574	6*	B	19 7 15.03	+2.571	.	21 20 43.3	+ 5.80	.	0.7634	9.9810	9.8765	9.0224
891	Rü. 7219	7.0	C	19 7 30	+1.0		58 04 03.1	+ 5.82		0.7650	9.9809	0.0177	9.3915
892	F. 3115	6.9	C	7 37	1.0	. .	58 15 49.8	5.83	. .	0.7657	9.9808	0.0178	9.3932
893	6579	6*	A	8 50.81	1.570	—0.015	49 37 16.0	5.93	+0.619	0.7733	9.9801	0.0038	9.3530
894	6586	6.7*	A	9 17.54	0.236	. .	65 46 10.1	5.97	0.02	0.7760	9.9798	0.0206	9.4338
895	6583	6.5*	A	19 9 18.69	+1.133	+0.004	56 38 48.1	+ 5.97	+0.03	0.7761	9.9798	0.0153	9.3958
896	6581	4.5*	A	19 9 30.12	+2.041	—0.001	38 55 54.7	+ 5.99		0.7773	9.9797	9.9719	9.2740
897	26 Heis Aq.	6*	C	9 38	2.7	.	14 52 03.8	6.00	.	0.7781	9.9796	9.8223	8.8852
898	6582	6*	A	9 54.22	2.581	+0.004	21 00 54.4	6.02	+0.016	0.7797	9.9795	9.8738	9.0332
899	6589	5.4*	A	10 50.61	2.578		21 10 15.8	6.10		0.7853	9.9789	9.8743	9.0409
900	6593	7.0	C	19 11 34	+1.998	.	40 08 31.1	+ 6.16		0.7896	9.9785	9.9755	9.2968
901	6601	5.6	C	19 11 41.16	+1.075	—0.001	57 29 23.8	+ 6.17	—0.113	0.7903	9.9784	0.0152	9.4141
902	6595	6.5*	AA	11 56.93	2.815	.	11 22 17.7	6.19	+0.022	0.7918	9.9782	9.7874	8.7845
903	6599	4.5*	A	12 01.75	2.081	+0.001	37 54 43.3	6.20	—0.012	0.7923	9.9782	9.9669	9.2786
904	6603	6.3	B	12 03.61	1.564		49 51 03.6	6.20		0.7925	9.9782	0.0029	9.3736
905	F. 3136	6.7	C	19 12 23	+0.9		59 28 10.9	+ 6.23		0.7944	9.9780	0.0167	9.4274
906	6602	6.5*	B	19 12 26.26	+2.537	.	22 48 06.0	+ 6.23	.	0.7947	9.9779	9.8856	9.0809
907	6612	3*	A	12 31.28	0.013	+0.020	67 26 30.1	6.24	+0.093	0.7952	9.9779	0.0188	9.4584
908	Gr. 2809	6*	C	13 16	1.7	. .	46 45 52.9	6.30	0.26	0.7995	9.9774	9.9951	9.3598
909	6615	6*	B	13 49.36	2.798	—0.004	12 08 44.0	6.35	+0.017	0.8026	9.9771	9.7950	8.8235
910	XIX, 99	7.5	C	19 13 53	+0.1	.	66 53 42.6	+ 6.35	.	0.8030	9.9770	0.0182	9.4645

(849) Maximum magnitude, 4.3*; minimum, 4.6*.
(893) 6579. The preceding star, the companion follows $+0^s.75$ and is north $7''.7$ according to Argelander.
(904) 6603. The A. R. is uncertain.

Cat. No.	Number and Catalogue.	Mag.	Class.	Right ascension, 1875.0.	Annual precession.	Proper motion.	Declination, 1875.0.	Annual precession.	Proper motion.	Log. a'.	Log. b'.	Log. c'.	Log. d'.
				h. m. s.			° ′ ″						
911	6617	6.7*	B	19 14 00.25	+2.818	. . .	11 18 17.1	+ 6.36	. .	0.8037	9.9770	9.7863	8.7938
912	6623	4*	AA	14 12.72	1.381	+0.004	53 08 18.5	6.38	+0.105	0.8048	9.9768	0.0081	9.4068
913	65 Heis Lyræ	6*	C	14 37	2.1		37 12 56.5	6.41		0.8071	9.9766	9.9631	9.2866
914	6624	6.6	B	14 47.35	2.004		40 07 51.5	6.43	. .	0.8081	9.9765	9.9741	9.3151
915	6626	6.3	A	19 15 17.76	+1.598		49 20 18.1	+ 6.47	+0.03	0.8109	9.9761	0.0003	9.3888
916	6629	6.7*	C	19 15 39.57	+0.591	+0.006	62 58 50.9	+ 6.50	.	0.8130	9.9759	0.0170	9.4606
917	F. 3148	6.7	C	15 56	0.9	.	59 36 22.7	6.52		0.8144	9.9757	0.0150	9.4481
918	6635	6.7	C	16 50.72	1.324	.	54 08 39.4	6.60	. .	0.8194	9.9751	0.0084	9.4260
919	6637	6.5*	A	17 43.71	2.456	+0.001	26 01 26.0	6.67	—0.014	0.8242	9.9745	9.9051	9.1643
920	6640	6.0	C	19 17 58.44	+1.100		57 24 35.1	+ 6.69	+0.05	0.8255	9.9744	0.0120	9.4490
921	Gr. 2829	7.1	C	19 18 34	+1.5		52 08 12.4	+ 6.74	. . .	0.8287	9.9740	0.0043	9.4239
922	6642	5.8	B	18 45.26	2.694		16 41 44.9	6.76	+0.005	0.8297	9.9738	9.8364	8.9858
923	Gr. 2835	6.5	C	18 47	0.4	.	64 09 15.8	6.76	. .	0.8298	9.9738	0.0156	9.4819
924	6644	5.6*	A	19 00.57	2.811	+0.052	11 40 42.9	6.78	+0.645	0.8310	9.9737	9.7892	8.8351
925	6647	6.7	B	19 19 08.23	+2.693	+0.002	16 42 50.3	+ 6.79		0.8317	9.9736	9.8364	8.9883
926	Gr. 2833	7.5	C	19 19 09	+1.1	.	57 31 34.9	+ 6.79	. . .	0.8317	9.9736	0.0115	9.4557
927	6648	5.6*	B	19 11.88	2.363	+0.003	29 22 41.5	6.79	+0.013	0.8320	9.9735	9.9241	9.2206
928	6651	6.7	A	19 36.83	2.151	.	36 12 21.8	6.83	+0.08	0.8342	9.9733	9.9569	9.3034
929	6652	6.7*	B	19 55.56	2.613	.	20 01 35.8	6.85	.	0.8358	9.9730	9.8630	9.0683
930	6654	5*	B	19 19 59.35	+2.625	+0.003	19 33 17.8	+ 6.86	—0.066	0.8362	9.9730	9.8594	9.0587
931	6656	6.5*	B	19 19 59.40	+1.894	.	43 08 44.4	+ 6.86	. . .	0.8362	9.9730	9.9819	9.3690
932	6662	5*	A	20 01.31	0.318	—0.001	65 28 26.3	6.86	+0.039	0.8363	9.9730	0.0132	9.4931
933	6659	6.6	C	20 07.03	1.573		50 01 39.6	6.87	. .	0.8368	9.9729	9.9994	9.4191
934	6657	6.5*	A	20 15.43	2.494	—0.013	24 41 17.9	6.88	—0.640	0.8376	9.9728	9.8957	9.1562
935	44 Heis Aqu.	6*	C	19 20 35	+2.8		12 46 22.9	+ 6.91		0.8392	9.9726	9.7998	8.8816
936	6661	6*	A	19 20 45.77	+2.618	—0.001	19 51 03.9	+ 6.92	—0.022	0.8402	9.9725	9.8615	9.0689
937	6663	6.2	A	21 00.45	2.623	—0.005	19 38 39.6	6.94	—0.055	0.8414	9.9723	9.8598	9.0658
938	6667	5*	A	21 38.99	2.159	.	36 04 05.7	6.99	+0.004	0.8447	9.9718	9.9554	9.3125
939	45 Heis Aqu.	6*	C	21 49	2.8	. .	14 01 53.1	7.01	.	0.8456	9.9717	9.8116	8.9280
940	Gr. 2844	6.2	C	19 22 08	+1.8	.	44 41 04.8	+ 7.03		0.8472	9.9715	9.9854	9.3922
941	Gr. 2845	6.7	C	19 22 12	+1.8	.	44 45 46.9	+ 7.04	.	0.8475	9.9714	9.9855	9.3928
942	XIX, 139	7.4	C	22 27	2.6	.	19 59 41.1	7.06	.	0.8488	9.9713	9.8620	9.0805
943	6673	7.0	A	23 17.02	2.373	—0.002	29 11 47.8	7.13	—0.043	0.8529	9.9707	9.9215	9.2390
944	6674	4.5*	AA	23 30.23	2.504	—0.010	24 24 47.4	7.14	—0.105	0.8540	9.9705	9.8928	9.1682
945	6681	6.5	C	19 23 31.06	+1.090		57 46 33.7	+ 7.15	.	0.8541	9.9705	0.0096	9.4793
946	48 Heis Aqu.	6*	C	19 23 37	+2.8	.	14 20 25.7	+ 7.16		0.8546	9.9704	9.8141	8.9463
947	6676	6.4	B	23 44.06	2.502		24 30 43.7	7.16	—0.03	0.8552	9.9703	9.8934	9.1710
948	6678	7.0	A	23 53.72	2.616	.	20 01 24.6	7.18	—0.01	0.8560	9.9702	9.8618	9.0884
949	6687	6*	A	24 22.25	1.471	. .	52 03 59.2	7.22	—0.047	0.8583	9.9699	0.0011	9.4531
950	D.M.12°,3940	7.5	C	19 24 43	+2.8	. . .	12 33 33.2	+ 7.24		0.8600	9.9696	9.7968	8.8954
951	6690	3*	A	19 25 40.81	+2.418	+0.001	27 41 54.4	+ 7.32	—0.011	0.8647	9.9689	9.9122	9.2298
952	6691	6.5	A	25 43.02	2.418	0.001	27 42 13.7	7.33	—0.003	0.8649	9.9689	9.9122	9.2301
953	6697	4.5*	A	26 33.18	1.511	+0.001	51 27 50.9	7.39	+0.118	0.8689	9.9683	9.9989	9.4600
954	6695	7.0	B	26 36.29	2.602		20 39 54 2	7.40		0.8691	9.9682	9.8657	9.1146
955	6698	5.4*	A	19 27 07.57	+2.228	.	34 11 17.9	+ 7.44	+0.01	0.8716	9.9678	9.9448	9.3191
956	XIX, 193	6.3	C	19 28 35	+1.3	. .	55 27 58.8	+ 7.56		0.8784	9.9667	0.0039	9.4921
957	6712	6.4	A	29 03.49	1.065	—0.062	58 19 58.4	7.60	—0.39	0.8807	9.9664	0.0067	9.5085
958	6709	5.6*	A	29 05.48	2.633	.	19 30 06.6	7.60	+0.013	0.8808	9.9663	9.8561	9.1022
959	6711	6.6	C	29 15.10	2.088		38 29 26.0	7.61	. .	0.8816	9.9662	9.9616	9.3735
960	6714	6*	A	19 29 52.84	+2.381	. .	29 11 21.4	+ 7.67		0.8845	9.9657	9.9188	9.2705
961	6717	6*	C	19 30 15.06	+1.651	.	48 59 27.7	+ 7.70		0.8863	9.9654	9.9919	9.4618
962	D.M.14°,3974	6.5	C	30 30	2.8		14 07 01.4	7.71	. . .	0.8873	9.9652	9.8102	8.9723
963	6718	6.5	C	30 36.67	1.955	. .	42 08 24.0	7.72	. .	0.8878	9.9651	9.9736	9.4123
964	6720	6.8	C	30 46.67	1.894	.	43 40 18.4	7.74		0.8885	9.9650	9.9781	9.4256
965	61 Heis Aqu.	6*	C	19 30 58	+2.8	. .	10 59 44.6	+ 7.75	.	0.8894	9.9649	9.7795	8.8677
966	6723	6*	A	19 31 05.46	+1.550		50 58 08.8	+ 7.76	—0.21	0.8900	9.9647	9.9955	9.4781
967	6721	6.5	B	31 06.52	1.707		47 53 34.9	7.76	—0.05	0.8900	9.9647	9.9890	9.4582
968	R. C. 4379	6.2	C	31 12	0.9	. . .	59 53 10.0	7.77	.	0.8905	9.9647	0.0065	9.5253
969	6722	6*	A	31 18.82	2.154	+0.001	36 40 06.2	7.78	+0.01	0.8910	9.9646	9.9535	9.3649
970	6724	6*	A	19 31 37.82	+2.714	.	16 11 00.7	+ 7.81	+0.010	0.8924	9.9643	9.8283	9.0354
971	6728	6.9	C	19 32 33.62	+1.907	. .	43 25 38.0	+ 7.88	.	0.8965	9.9636	9.9765	9.4316
972	6730	7.0	A	32 34.92	+1.608	+0.001	49 57 32.7	7.88	+0.04	0.8966	9.9636	9.9926	9.4784
973	6735	5.6*	A	32 35.92	—0.207	+0.103	69 26 54.6	7.88	—1.77	0.8967	9.9635	0.0058	9.5658
974	6731	6.5	C	32 45.42	—1.867	—0.010	44 25 09.6	7.90	—0.09	0.8974	9.9634	9.9792	9.4403
975	6734	5.4*	A	19 33 05.29	+1.611	—0.002	49 55 56.6	+ 7.92	+0.23	0.8989	9.9632	9.9922	9.4805

(922) 6642, 6647. Magnitude combiued, 6*.
(966) 6723. A. R. uncertaiu.
(972) 6730. The value of the proper motion in declination here adopted is taken from the copy of C. A. which was Tiele's. It well represents Piazzi.

Cat. No.	Number and Catalogue.	Mag.	Class.	Right ascension, 1875.0.	Annual precession.	Proper motion.	Declination, 1875.0.	Annual precession.	Proper motion.	Log. a'.	Log. b'.	Log. c'.	Log. d'.
				h. m. s.			° ′ ″						
976	6737	6.7*	A	19 33 26.58	+0.616	+0.008	63 09 23.2	+ 7.95	. .	0.9004	9.9629	0.0065	9.5487
977	6740	5*	A	34 26.31	2.368	−0.001	29 51 59.2	8.03	+0.045	0.9048	9.9620	9.9204	9.2998
978	6741	6.6	C	34 28.39	1.662	. .	48 59 44.5	8.03	0.13	0.9049	9.9620	9.9895	9.4805
979	6739	4.5*	A	34 30.54	2.680	+0.002	17 43 41.0	8.04	+0.005	0.9051	9.9620	9.8403	9.0865
980	67 Heis. Aquil.	6*	C	19 35 18	+2.8	.	13 31 37.1	+ 8.10	. .	0.9085	9.9613	9.8033	8.9754
981	6745	6.5*	B	19 35 22.37	+1.950	+0.004	42 31 49.6	+ 8.11	+0.05	0.9087	9.9613	9.9722	9.4365
982	6744	4.5*	A	35 26.03	2.693	+0.001	17 11 15.9	8.11	−0.039	0.9091	9.9612	9.8355	9.0775
983	6748	6.5*	B	35 52.54	1.347	. .	54 40 51.2	8.15	+0.05	0.9110	9.9608	9.9984	9.5205
984	6747	6.9	A	36 20.97	2.814	−0.001	11 54 04.4	8.19	. .	0.9130	9.9604	9.7873	8.9251
985	6749	6.5*	B	19 36 41.11	+2.823	+0.001	11 32 02.0	+ 8.21	+0.018	0.9144	9.9602	9.7836	8.9132
986	6750	7.0	B	19 36 45.20	+2.671	. .	18 10 21.3	+ 8.22	+0.01	0.9147	9.9601	9.8431	9.1065
987	6754	6.5*	A	36 58.81	1.842	+0.011	45 13 46.8	8.23	+0.09	0.9156	9.9599	9.9790	9.4647
988	Gr. 2923	7.0	B	37 51.58	1.001	. .	59 32 55.2	8.31	−0.07	0.9193	9.9592	0.0020	9.5527
989	6763	6.3	B	38 29.45	1.611	−0.021	50 14 08.6	8.35	−0.016	0.9219	9.9586	9.9896	9.5055
990	6758	6*	A	19 38 31.10	+2.492	+0.002	25 28 26.6	+ 8.36	+0.024	0.9220	9.9586	9.8936	9.2535
991	6764	6.2	B	19 38 32.32	+1.612	−0.003	50 13 41.6	+ 8.36	−0.164	0.9221	9.9586	9.9896	9.5057
992	6759	6.7*	A	38 45.27	2.791		13 00 16.3	8.38		0.9230	9.9584	9.7974	8.9731
993	6761	7.4	B	38 46.75	2.792		12 55 54.1	8.38	.	0.9231	9.9584	9.7967	8.9708
994	6765	6.7	C	38 46.79	2.109	. .	38 22 28.5	8.38	.	0.9231	9.9584	9.9563	9.4139
995	6762	6.8	A	19 38 48.63	+2.455	−0.002	26 50 15.5	+ 8.38		0.9232	9.9583	9.9016	9.2757
996	6769	6.0	C	19 39 34.64	+1.999	. .	41 28 26.7	+ 8.44	.	0.9264	9.9576	9.9665	9.4453
997	6771	5.6*	A	39 46.09	2.156	+0.007	37 03 12.2	8.46	+0.033	0.9272	9.9575	9.9507	9.4050
998	6772	3*	AA	40 18.98	2.851	0.002	10 18 36.4	8.50	+0.002	0.9294	9.9570	9.7701	8.8803
999	6780	6.2	C	40 48.44	1.156	0.020	57 43 08.5	8.54	−0.06	0.9314	9.9566	9.9986	9.5563
1000	6779	3.2*	AA	19 41 04.04	+1.869	+0.005	44 49 35.7	+ 8.56	+0.04	0.9324	9.9563	9.9756	9.4784
1001	6777	6.7*	B	19 41 11.73	+2.234	.	34 42 33.5	+ 8.57	.	0.9329	9.9562	9.9403	9.3862
1002	6784	5.6*	A	41 40.86	2.274	.	33 26 16.2	8.61	−0.433	0.9349	9.9558	9.9348	9.3739
1003	6783	4*	B	41 48.94	2.674	+0.006	18 13 38.8	8.62	+0.036	0.9354	9.9557	9.8417	9.1285
1004	6789	6*	A	42 48.57	2.826		11 30 22.7	8.70	−0.006	0.9394	9.9548	9.7817	8.9371
1005	6791	6.8	B	19 42 59.60	+2.829		11 22 28.4	+ 8.71		0.9401	9.9546	9.7803	8.9329
1006	6794	5.6*	A	19 43 25.76	+2.661	+0.004	18 49 47.6	+ 8.75	+0.032	0.9418	9.9542	9.8458	9.1485
1007	6799	6*	C	43 47.70	1.755		47 35 58.3	8.78	.	0.9432	9.9538	9.9807	9.5094
1008	6800	6.9	C	44 04.36	+2.287	.	33 07 32.5	8.80	.	0.9443	9.9536	9.9317	9.3797
1009	6808	6*	A	44 28.44	−0.061	−0.005	69 01 53.3	8.83	−0.05	0.9458	9.9532	9.9972	9.6139
1010	Gr. 2946	7.0	B	19 44 54.23	+1.250		56 36 07.3	+ 8.86		0.9475	9.9528	9.9947	9.5670
1011	6806	6.8	B	19 45 02.06	+2.121	+0.002	38 23 46.9	+ 8.87	. . .	0.9480	9.9527	9.9528	9.4390
1012	6805	6.5*	B	45 02.28	2.857	+0.016	10 06 16.0	8.87	−0.148	0.9480	9.9527	9.7668	8.8900
1013	6810	6.5*	A	45 41.08	2.580	−0.001	22 17 37.0	8.92	−0.011	0.9505	9.9521	9.8699	9.2274
1014	χ Cygni.	Var.	B	45 45.74	2.306		32 35 57.7	8.93	.	0.9508	9.9520	9.9284	9.3800
1015	6818	6.5	B	19 46 01.69	+1.072		59 06 19.2	+ 8.95	+0.14	0.9518	9.9518	9.9959	9.5832
1016	6813	6*	B	19 46 08.24	+2.123	+0.001	38 24 06.4	+ 8.96	+0.107	0.9522	9.9517	9.9522	9.4432
1017	XIX, 306	6.7*	C	46 13	2.8		11 19 15.0	8.96	−0.31	0.9525	9.9516	9.7789	8.9433
1018	XIX, 307	6.7*	C	46 18	2.9		10 01 57.3	8.97	.	0.9528	9.9515	9.7657	8.8917
1019	6817	6*	B	46 19.89	2.058		40 16 57.4	8.97	−0.02	0.9529	9.9515	9.9586	9.4614
1020	6819	6.7*	A	19 46 47.32	+2.675		18 21 06.7	+ 9.01	−0.003	0.9547	9.9510	9.8408	9.1506
1021	XIX, 312	8.0	C	19 47 05	+2.7	. .	18 25 11.8	+ 9.03	.	0.9558	9.9508	9.8412	9.1533
1022	6824	5.6*	B	47 29.56	1.507	−0.004	52 40 16.9	9.06	−0.08	0.9573	9.9504	9.9878	9.5556
1023	Gr. 2957	6.2	C	47 35	1.8		47 03 23.4	9.07		0.9577	9.9503	9.9770	9.5200
1024	XIX, 6920	7.2	B	47 52.58	2.636	. .	20 00 50.4	9.09	+0.04	0.9588	9.9500	9.8529	9.1909
1025	827	5*	A	19 48 08.86	+2.547	+0.003	23 45 17.0	+ 9.12	+0.035	0.9598	9.9497	9.8785	9.2622
1026	6830	6*	B	19 48 26.18	+1.768		47 36 36.1	+ 9.14	. .	0.9608	9.9495	9.9777	9.5270
1027	6834	6.1	A	48 26.43	+0.934	.	60 53 16.4	9.14	+0.05	0.9608	9.9495	9.9951	9.6000
1028	6836	4.3*	AA	48 35.18	−0.188	+0.016	69 56 58.2	9.15	+0.022	0.9614	9.9493	9.9933	9.6321
1029	6835	6*	A	49 12.85	+2.542	+0.005	23 59 34.6	9.20	−0.017	0.9637	9.9487	9.8795	9.2707
1030	6838	5.6*	A	19 50 18.95	+2.839	.	11 05 36.8	+ 9.29	+0.023	0.9678	9.9476	9.7755	8.9498
1031	6839	6.5*	A	19 50 20.51	+2.724	. . .	16 18 18.7	+ 9.29	+0.013	0.9678	9.9476	9.8230	9.1140
1032	6847	5.6*	B	50 43.49	1.234	+0.002	57 11 46.8	9.32	0.00	0.9692	9.9472	9.9910	9.5916
1033	Gr. 2978	7.5	C	50 44	1.2	.	57 50 22.5	9.32		0.9692	9.9472	9.9915	9.5947
1034	R. C. 4507	6.8	C	51 20	2.1		39 50 30.6	9.36		0.9714	9.9466	9.9541	9.4758
1035	6852	6*	B	19 51 20.86	+1.074		59 22 42.3	+ 9.36		0.9714	9.9466	9.9921	9.6040
1036	Gr. 2977	6.7	C	19 51 21	+1.8		47 12 37.4	+ 9.36		0.9714	9.9466	9.9748	9.5349
1037	6849	5.6*	B	51 23.73	2.143	.	38 09 20.1	9.37	. .	0.9716	9.9465	9.9481	9.4603
1038	6851	4.5*	B	51 36.96	2.252	−0.003	34 45 08.5	9.39	−0.023	0.9724	9.9463	9.9346	9.4261
1039	6853	6*	B	52 04.92	2.723	+0.001	16 27 14.2	9.42	+0.033	0.9741	9.9459	9.8236	9.1241
1040	6856	5.6*	A	19 52 23.84	+1.556	−0.003	52 06 27.9	+ 9.44	−0.05	0.9752	9.9455	9.9835	9.5702

(983) 6748. All observations except Groombridge are better represented with P. M. + 0″.14. Declination 1875, 54° 40′ 52″.8.
(987) 6754. A. R. less sure than declination.
(989) 6763, 6765. Combined magnitude, 6.5*.
(1014) Maximum, 4*; minimum, 13*.
(1039) No. 713 = B. A. C. 6856. Prof. Anwers's correction to Bessel is + 5″.7 from 2 observations. This is nearly confirmed by 22 sector observations, which give + 3.″4.

Cat. No.	Number and Catalogue.	Mag.	Class.	Right ascension, 1875.0.	Annual precession.	Proper motion.	Declination, 1875.0.	Annual precession.	Proper motion.	Log. a'.	Log. b'.	Log. c'.	Log. d'.
				h. m. s.			° ′ ″						
1041	6855	7.0	A	19 52 33.08	+2.730	+0.007	16 09 29.5	+ 9.46		0.9757	9.9454	9.8210	9.1181
1042	R. C. 4521	6.5	C	52 36	1.1		59 16 11.6	9.46		0.9759	9.9453	9.9911	9.6080
1043	6861	6.8	A	52 41.07	0.989		60 29 33.3	9.47		0.9762	9.9452	9.9916	9.6137
1044	6862	6.6	C	52 45.12	1.007		60 17 00.2	9.47		0.9764	9.9452	9.9915	9.6130
1045	6863	6.3	C	19 52 53.13	+1.192		57 55 14.0	+ 9.48	—0.07	0.9769	9.9450	9.9899	9.6028
1046	6857	6.5	B	19 52 53.27	+2.082	.	40 01 58.3	+ 9.43	.	0.9769	9.9450	9.9538	9.4831
1047	6860	6.8	C	53 00.31	2.147	. .	38 07 22.0	9.49	.	0.9773	9.9449	9.9470	9.4657
1048	6858	4.3*	A	53 11.84	2.662	+0.005	19 09 14.0	9.51	+0.034	0.9780	9.9447	9.8443	9.1919
1049	6865	6.7*	C	53 19.90	1.640		50 34 02.0	9.52		0.9785	9.9446	9.9802	9.5642
1050	6867	6.5*	C	19 53 32.20	+1.151		58 30 46.2	+ 9.53	.	0.9792	9.9444	9.9898	9.6079
1051	6869	6*	B	19 53 33.93	+0.618	—0.003	64 23 19.4	+ 9.53	—0.035	0.9793	9.9443	9.9916	9.6322
1052	XIX, 370	6*	C	53 36	1.3	.	56 21 06.2	9.54		0.9795	9.9443	9.9880	9.5977
1053	6866	6*	A	53 48.72	2.577	—0.004	22 45 44.8	9.55	+0.02	0.9802	9.9441	9.8694	9.2656
1054	6868	6*	A	54 24.59	2.708		17 10 34.8	9 60		0.9823	9.9435	9.8285	9.1504
1055	XIX, 362	7.5	C	19 54 30	+2.7		17 16 10.9	+ 9.61		0.9826	9.9434	9.8292	9.1530
1056	6875	6.5*	A	19 55 20.13	+2.198		36 42 04.6	+ 9.67	+0.027	0.9856	9.9425	9.9402	9.4597
1057	6876	6*	C	55 24.82	1.882	.	45 25 55.7	9.68	.	0.9857	9.9424	9.9678	9.5363
1058	6881	6.5*	C	55 56.74	1.590	+0.006	51 42 50.1	9.72	.	0.9875	9.9419	9.9802	9.5802
1059	6879	5*	A	55 57.11	2.465	+0.003	27 24 33.7	9.72	+0.028	0.9876	9.9419	9.8964	9.3485
1060	6882	6.2	B	19 56 26.90	+2.540		24 27 17.2	+ 9.76	—0.008	0.9893	9.9414	9.8789	9.3041
1061	XIX, 391	7.5	C	19 56 27	+1.2	.	57 28 03.3	+ 9.76	. . .	0.9893	9.9413	9.9867	9.6130
1062	6883	6.5*	A	56 43.24	2.537	+0 005	24 35 20.6	9.78	+0.054	0.9902	9.9411	9.8796	9.3072
1063	Gr. 3019	6.5	B	56 54.77	0.762		63 11 35.6	9.79	—0.025	0.9903	9.9109	9.9888	9.6393
1064	Gr. 3013	7.0	C	57 31	2.1		40 30 41.8	9.84		0.9929	9.9402	9.9523	9.5034
1065	Gr. 3014	6.8	C	19 57 42	+2.0		43 46 21.5	+ 9.85		0.9935	9.9400	9.9618	9.5313
1066	6890	6.5*	A	19 57 46.82	+2.744	. .	15 40 55.2	+ 9.86	+0.008	0.9938	9.9399	9.8150	9.1234
1067	6895	5.6*	A	57 49.35	1.695	+0.001	49 45 27.1	9.86	—0.004	0.9939	9.9399	9.9754	9.5744
1068	6896	7.0	B	58 18.90	2.721	—0.002	16 46 16.5	9.90	.	0.9956	9.9394	9.8237	9.1536
1069	6897	6*	A	58 29.21	2.722	—0.029	16 43 58.8	9.91	—0.383	0.9961	9.9392	9.8233	9.1532
1070	XIX, 394	7.2	C	19 58 36	+2.7		17 23 01.2	+ 9.92		0.9935	9.9391	9.8285	9.1697
1071	6901	5.6*	B	19 59 36.84	+2.658	+0.004	19 38 03.1	+10.00	+0.087	0.9999	9.9380	9.8451	9.2241
1072	6905	6.5*	A	20 0 08.83	0.648		64 28 15.9	10 04	—0.018	1.0016	9.9374	9.9860	9.6549
1073	XX, 1	8.5	C	0 51	0.7	. .	64 18 24.6	10.09	. .	1.0039	9.9366	9.9853	9.6565
1074	6913	6.5	B	0 56.65	+0.679	+0.003	64 16 54.6	10.10	+0.012	1.0042	9.9365	9.9853	9.6568
1075	6912	5.6*	A	20 1 31.09	2.576		23 15 19.2	+10.14	—0.005	1.0061	9.9359	9.8688	9.3003
1076	6918	6*	C	20 1 43.28	+1.623	.	51 28 54.1	+10.16	+0 05	1.0067	9.9356	9.9754	9.5980
1077	6915	6.5*	B	1 43.14	2.245	—0.019	35 37 45.1	10.16	—0.42	1.0067	9.9356	9.9319	9.4699
1078	6926	5*	A	2 14.91	0.290	+0.003	67 31 01.8	10.20	+0.045	1.0084	9.9350	9.9830	9.6719
1079	XIX, 420	6.5	C	2 25	2.7		16 18 08.9	10.21		1.0090	9.9349	9.8183	9.1550
1080	6924	6.5	C	20 2 30.93	+1.367		55 58 46.1	+10.22		1.0093	9.9347	9.9806	9.6256
1081	103 Heis. Aq.	6*	C	20 2 40	+2.9	.	10 21 47.0	+10.23	.	1.0098	9.9346	9.7646	8.9626
1082	6923	6*	A	2 56.38	1.558	+0.027	52 47 48.8	10.25	+0.26	1.0103	9.9343	9.9763	9.6096
1083	6930	6.5	C	3 10.07	0.765	.	63 31 52.0	10.27	+0.07	1.0114	9.9340	9.9833	9.6611
1084	6927	6.8	B	3 16.56	2.612	—0.006	21 47 29.3	10.27	—0.15	1.0117	9.9339	9.8584	9.2792
1085	XX, 2	7.0	C	20 3 27	+2.7		16 32 43.5	+10.29		1.0123	9.9337	9.8198	9.1646
1086	6932	6*	B	20 3 33.35	+0.947	+0.017	61 37 58.3	+10.29	+0.05	1.0126	9.9336	9.9829	9.6549
1087	6939	7.0	C	4 20.96	0.285	+0.003	67 40 02.6	10.36	—0.04	1.0151	9.9327	9.9809	9.6791
1088	6933	6*	A	4 25.68	2.672	0.006	20 32 41.6	10.36	+0.102	1.0154	9.9326	9.8493	9.2584
1089	6937	5.6*	A	4 47.11	2.226		35 28 21.9	10.39	+0.047	1.0165	9.9322	9.9334	9.4884
1090	6940	6.5*	A	20 5 20.38	+2.501	. .	26 32 05.1	+10.43	—0.002	1.0182	9.9315	9.8864	9.3661
1091	6941	6.3	A	20 5 33.37	+2.638	+0.002	20 45 49.3	+10.44	+0.032	1.0189	9.9313	9.8503	9.2663
1092	6943	6*	A	6 34.54	2.505	.	26 26 13.6	10.52	—0.016	1.0220	9.9301	9.8851	9.3684
1093	6944	6*	A	6 46.23	2.514	+0.002	26 06 24.6	10.53	—0.019	1.0226	9.9299	9.8831	9.3640
1094	R. C. 4639	6.8	B	6 57.75	0.959		61 42 28.7	10.55	—0.06	1.0232	9.9296	9.9798	9.6658
1095	6952	5*	A	20 8 29.45	+2.772	..	14 49 05.9	+10.66	+0.075	1.0279	9.9278	9.8035	9.1335
1096	6959	6*	B	20 9 03.06	+1.671	.	51 05 18.1	+10.70		1.0295	9.9272	9.9687	9.6184
1097	6957	6*	A	9 06.41	2.462	+0.002	28 19 02.2	10.71	—0.03	1.0297	9.9271	9.8938	9.4037
1098	6962	5.0	A	9 22.32	1.883	0.003	46 26 17.9	10.73	—0.022	1.0305	9.9268	9.9596	9.5885
1099	6963	6.7	C	9 30.37	2.018	.	43 00 01.7	10.74	—0.03	1.0309	9.9266	9.9510	9.5625
1100	6970	6*	A	20 9 31 91	+0.975	+0.018	61 42 01.0	+10.74	+0.05	1.0310	9.9266	9.9774	9.6735
1101	D.M.59°,2193	6.5	C	20 9 35	+1.2		59 18 44.2	+10.74		1.0311	9.9265	9.9766	9.6634
1102	6965	4*	A	9 41.71	1.883		46 21 46.6	10.75	0.00	1.0315	9.9264	9.9592	9.5889
1103	XX, 63	7.5	C	9 43	1.9	.	46 20 00.6	10.75		1.0315	9.9264	9.9591	9.5887
1104	6967	5*	A	9 51.14	2.239	+0.004	36 25 28.5	+10.76	+0.09	1.0319	9.9262	9.9295	9.5034
1105	6966	5*	A	20 9 58.06	+2.540		25 12 41.5	+10.77		1.0323	9.9261	9.8761	9.3595

(1067) 6895. The A. R. is relatively ill-determined.

(1098) 6962, 6965. Combined magnitude, $4^m.5$.

Cat. No.	Number and Catalogue.	Mag.	Class.	Right ascension, 1875.0.	Annual precession.	Proper motion.	Declination, 1875.0.	Annual precession.	Proper motion.	Log. a'.	Log. b'.	Log. c'.	Log. d'.
				h. m. s.			° ′ ″						
1106	6969	7.0	A	20 9 59.22	+2.240	+0.001	36 22 20.5	+10.77	+0.048	1.0323	9.9260	9.9292	9.5033
1107	6968	6.5*	A	10 06.26	2.590	—0.002	23 07 40.8	10.78	—0.018	1.0327	9.9259	9.8635	9.3247
1108	6976	4.5*	A	10 29.45	1.390	+0.010	56 11 08.7	10.81	+0.065	1.0338	9.9254	9.9737	9.6512
1109	6973	5*	A	10 35.33	2.486	—0.003	27 25 54.8	10.82	+0.012	1.0341	9.9253	9.8882	9.3954
1110	6975	6*	A	20 10 50.24	+2.635		21 12 59.9	+10.84	—0.021	1.0349	9.9250	9.8505	9.2913
1111	6980	6.0	B	20 11 09.71	+1.105	+0.009	60 15 30.9	+10.86	+0.038	1.0358	9.9246	9.9755	9.6723
1112	6978	7.1	A	11 15.72	2.489	.	27 23 32.2	10.86	.	1.0361	9.9245	9.8876	9.3968
1113	6979	6.5*	A	11 26.17	2.564	0.003	24 17 14.2	10.88	—0.018	1.0366	9.9243	9.8698	9.3486
1114	Gr. 3105	6.5	C	11 31	2.2	.	38 30 56.8	10.89	.	1.0369	9.9242	9.9358	9.5290
1115	6983	5.4*	A	20 11 36.48	+1.852	+0.002	47 19 51.7	+10.89	0.00	1.0371	9.9241	9.9607	9.6014
1116	Gr. 3110	6*	C	20 11 57	+1.9		45 11 52.2	+10.92		1.0382	9.9236	9.9546	9.5870
1117	6985	6.3	B	12 05.11	1.742	.	49 50 55.1	10.93		1.0385	9.9235	9.9641	9.6196
1118	6986	6.5*	B	12 28.62	2.132	+0.011	39 58 45.1	10.95	.	1.0396	9.9230	9.9398	9.5454
1119	6994	6.9	B	12 40.53	0.738	—0.007	64 22 50.9	10.97	0.00	1.0402	9.9228	9.9742	9.6931
1120	6990	Var.	A	20 13 10.77	+2.208		37 38 42.5	+11.01		1.0417	9.9221	9.9315	9.5254
1121	6996	6.7	B	20 13 41.40	+2.123	+0.002	40 20 35.4	+11.05	—0.007	1.0432	9.9215	9.9400	9.5522
1122	6997	6*	A	13 47.66	2.242	0.006	36 36 34.2	11.05	+0.03	1.0434	9.9214	9.9273	9.5168
1123	6998	5.6*	A	13 51.09	2.302	+0.001	34 35 35.2	11.06	+0.003	1.0436	9.9213	9.9195	9.4956
1124	7001	7	C	14 24.52	2.182		38 36 49.6	11.10	.	1.0452	9.9206	9.9339	9.5353
1125	114 Heis. Aq.	6*	C	20 14 41	+2.7		17 24 04.1	+11.12		1.0460	9.9203	9.8215	9.2196
1126	7007	8.0	B	20 14 56.91	+1.787	.	49 06 23.0	+11.14	—0.067	1.0468	9.9199	9.9603	9.6231
1127	7006	7.0	A	15 07.72	2.242	+0.003	36 44 23.7	11.15	+0.01	1.0472	9.9197	9.9268	9.5219
1128	Gr. 3142	6.5	C	15 19	1.5		55 00 25.5	11.16		1.0478	9.9194	9.9682	9.6590
1129	7008	6.8	A	15 43.38	2.172	.	39 00 36.1	11.19	. .	1.0489	9.9189	9.9342	9.5458
1130	7017	6*	A	20 16 17.43	+0.530	+0.089	66 27 06.9	+11.23	+0.269	1.0505	9.9182	9.9097	9.7106
1131	7013	6*	A	20 16 40.96	+2.577	.	24 02 54.9	+11.26	+0.011	1.0516	9.9177	9.8053	9.3596
1132	7024	6*	B	17 31.35	1.008	+0.001	61 51 38.0	11.32	—0.003	1.0540	9.9166	9.9696	9.6972
1133	7022	2.3*	A	17 44.52	2.151	0.003	39 51 27.2	11.34	+0.017	1.0546	9.9163	9.9053	9.5592
1134	7027	6*	B	18 19.12	2.127	. .	40 37 38.8	11.38	—0.02	1.0562	9.9156	9.9373	9.5680
1135	7029	5*	A	20 18 52.12	+2.390	+0.003	31 47 15.0	+11.42		1.0577	9.9149	9.9043	9.4771
1136	7037	6*	A	20 19 32.23	+0.290		68 28 49.9	+11.47	+0.022	1.0595	9.9140	9.9649	9.7260
1137	7035	6.7	C	19 47.36	1.548		54 16 13.9	11.49		1.0602	9.9136	9.9632	9.6674
1138	40 Heis. Vul.	6*	B	20 08.74	2.651		21 00 13.0	11.51	.	1.0611	9.9132	9.8442	9.3134
1139	7041	6.9	B	21 04.64	2.082		42 11 48.2	11.58	+0.03	1.0636	9.9119	9.9394	9.5887
1140	7051	8.3	C	20 21 23.36	+1.032		61 51 44.0	+11.60	+0.10	1.0645	9.9115	9.9656	9.7077
1141	7048	7.3	C	20 21 33.85	+2.157	.	39 59 34.6	+11.61		1.0649	9.9113	9.9326	9.5708
1142	7055	7.3	C	22 18.10	1.559		54 16 32.2	11.67		1.0669	9.9103	9.9608	9.6742
1143	7060	6.4	B	22 29.47	1.249	.	59 11 31.3	11.68		1.0674	9.9100	9.9640	9.6992
1144	7061	6*	A	22 56.42	2.222	—0.001	38 01 51.0	11.71	—0.04	1.0686	9.9094	9.9252	9.5561
1145	7062	6*	A	20 23 13.07	+1.825	+0.007	48 58 09.7	+11.73	+0.03	1.0693	9.9090	9.9526	9.6448
1146	7064	6.7	B	20 23 22.13	+1.451	. .	56 13 38.1	+11.74	+0.02	1.0697	9.9088	9.9614	9.6873
1147	7067	4.5*	A	24 17.31	2.448	+0.001	29 57 09.6	11.81	0.00	1.0721	9.9076	9.8918	9.4683
1148	7065	6	A	24 18.84	2.871		10 28 43.2	11.81	+0.012	1.0722	9.9075	9.7586	9.0298
1149	XX, 171	6.7*	C	24 28	2.7	. .	19 15 02.7	11.82	. .	1.0726	9.9073	9.8299	9.2886
1150	7073	6*	A	20 24 34.31	+2.286	+0.001	36 02 18.9	+11.83	+0.01	1.0729	9.9072	9.9170	9.5430
1151	7076	6.8	B	20 24 39.19	+1.850		48 30 13.8	+11.83	—0.04	1.0731	9.9071	9.9504	9.6454
1152	7079	6.5	A	25 14.38	2.865		10 50 26.8	11.87		1.0746	9.9062	9.7617	9.0468
1153	Gr. 3208	7.0	C	25 36	0.3	.	68 54 47.9	11.90		1.0755	9.9057	9.9659	9.7533
1154	7083	6.7*	A	25 51.58	1.977	+0.010	45 30 17.5	11.92	+0.183	1.0762	9.9054	9.9434	9.6273
1155	XX, 185	7.5	C	20 26 08	+2.8		16 34 16.3	+11.94		1.0769	9.9050	9.8096	9.2299
1156	7085	6.5	A	20 26 11.25	+1.856	+0.006	48 31 56.0	+11.94	+0.005	1.0770	9.9049	9.9490	9.6495
1157	7084	6.5	A	26 14.46	2.276	0.003	36 30 56.3	11.95	—0.003	1.0772	9.9048	9.9173	9.5495
1158	7086	6*	A	26 19.66	1.500	.	55 38 57.4	11.95	. .	1.0774	9.9047	9.9580	9.6920
1159	7090	7.2	B	26 36.69	0.369	+0.008	68 21 03.0	11.97	—0.008	1.0781	9.9043	9.9570	9.7442
1160	7088	4*	AA	20 27 14.40	+2.865	0.000	10 52 47.1	+12.01	—0.027	1.0797	9.9034	9.7613	9.0534
1161	7091	5	A	20 27 27.33	+1.849	.	48 47 56.4	+12.03	—0.042	1.0802	9.9031	9.9483	9.6545
1162	7098	4	A	27 28.84	1.010	—0.008	62 34 27.5	12.03	—0.02	1.0803	9.9031	9.9590	9.7264
1163	7094	6.5	A	28 02.27	2.833	+0.006	12 36 01.3	12.07	+0.042	1.0817	9.9023	9.7764	9.1183
1164	D.M.17°,4355	6.7	C	28 20	2.7		17 45 31.8	12.09		1.0824	9.9019	9.8173	9.2646
1165	Gr. 3215	6.7	C	20 28 27	+2.1		41 27 25.7	+12.10	+0.43	1.0828	9.9017	9.9310	9.6015
1166	7100	6.5	C	20 28 31.24	+2.085		42 45 58.9	+12.10		1.0829	9.9016	9.9344	9.6126
1167	7101	7.0	C	28 32.94	2.143		41 02 49.1	12.11	.	1.0830	9.9016	9.9298	9.5982
1168	44* Heis. Vul.	6.7	C	28 36	2.7		20 33 30.2	12.11		1.0831	9.9015	9.8364	9.3265
1169	7105	6*	C	28 43.21	1.471	.	56 21 21.5	12.12	. .	1.0834	9.9013	9.9560	9.7016
1170	7103	5.6	A	20 29 02.42	+2.331	—0.001	34 49 25.6	+12.14	—0.001	1.0842	9.9008	9.9088	9.5388

(1106) 6969. The decl. of Armagh has been rejected. (1120) 6990. Maximum, 3m.*; minimum, 6m.*.
(1127) No. 771 = B. A. C. 7006; 2 observations by Prof. Yarnall in 1873 give 23″.6.
(1130) 7017. The right ascensions do not well agree.
(1152) 7079. Middle point between two components; their difference is + 1s.03 in A. R. and 3″.8 in declination.
(1158) 7086. A. R. relatively uncertain.
(1167) 7101. No. 369 = B. A. C. 7101. Two observations at Washington in 1873 (Transit Circle) give P. M. + 0″.03; declination, 49″.2.

Cat. No.	Number and Catalogue.	Mag.	Class.	Right ascension, 1875.0.	Annual precession.	Proper motion.	Declination, 1875.0.	Annual precession.	Proper motion.	Log. a'.	Log. b'.	Log. c'.	Log. d'.
				h. m. s.			° ′ ″						
1171	Gr. 3220	6.2	C	20 29 21	+2.1		41 20 50.4	+12.16	−0.12	1.0850	9.9004	9.9299	9.6028
1172	7107	5.4*	B	29 27.75	2.801		14 14 39.9	12.17	+0.011	1.0853	9.9002	9.7897	9.1742
1173	7112	6*	C	29 49.00	1.963		46 15 56.5	12.19		1.0862	9.8997	9.9413	9.6429
1174	7114	6.7*	C	30 05.60	2.160		40 40 06.0	12.21		1.0868	9.8993	9.9274	9.5987
1175	R. C. 4871	7.2*	C	20 30 28	+2.1		41 17 16.0	+12.24		1.0878	9.8988	9.9289	9.6050
1176	7117	6.7*	A	20 30 46.90	+2.568	+0.003	25 27 00.4	+12.26	0.00	1.0885	9.8983	9.8644	9.4196
1177	7119	6.7*	C	30 50.52	2.137		41 27 30.7	12.27		1.0887	9.8992	9.9289	9.6074
1178	7120	6.7*	C	31 11.91	1.747	.	51 25 25.2	12.29	.	1.0895	9.8977	9.9485	9.6805
1179	7121	3.4*	A	31 41.16	2.805	0.007	14 09 41.7	12.32	−0.030	1.0907	9.8970	9.7880	9.1771
1180	7126	6*	A	20 31 44.69	+2.556	+0.001	26 01 41.0	+12.32	−0.011	1.0909	9.8969	9.8669	9.4310
1181	7125	6.5*	A	20 31 50.30	+2.868		10 56 33.7	+12.33	−0.022	1.0911	9.8968	9.7602	9.0673
1182	108 H. Cyg.	6*	C	32 41	2.33	.	37 53 41.5	12.39	. .	1.0932	9.8955	9.9166	9.5793
1183	7131	6.2	A	32 26.83	2.436	−0.004	31 08 12.6	12.38	−0.05	1.0926	9.8959	9.8911	9.5040
1184	7132	6.4	A	32 28.07	2.437	−0.004	31 05 14.4	12.38	0.023	1.0926	9.8958	9.8909	9.5034
1185	7137	6*	B	20 32 49.99	+2.831		12 52 39.2	+12.40	−0.008	1.0935	9.8953	9.7768	9.1394
1186	7140	5*	A	20 32 56.33	+2.673	+0.004	20 45 49.1	+12.41	0.00	1.0938	9.8951	9.8352	9.3412
1187	7143	5.6	C	33 05.21	2.611	+0.002	23 40 43.2	12.42	−0.012	1.0941	9.8949	9.8529	9.3958
1188	7146	6.0	A	33 17.05	2.782		15 24 01.5	12.43		1.0946	9.8946	9.7970	9.2166
1189	Gr. 3243	7.2	C	33 33	2.1		42 24 08.3	12.45		1.0952	9.8942	9.9289	9.6219
1190	7153	6.5	C	20 33 39.60	+1.704		52 32 14.2	+12.46		1.0955	9.8941	9.9474	9.6930
1191	7149	4.3*	AA	20 33 49.90	+2.781	+0.007	15 28 20.5	+12.47	−0.001	1.0959	9.8938	9.7973	9.2199
1192	7152	6.5	A	33 50.83	2.469		29 53 51.5	12.47	−0.06	1.0959	9.8938	9.8845	9.4914
1193	7150	6.8	B	33 52.32	2.872		10 48 22.8	12.47	+0.08	1.0960	9.8937	9.7582	9.0668
1194	7157	7.3	A	34 45.88	2.788		15 11 59.1	12.53	.	1.0981	9.8924	9.7947	9.2146
1195	7158	6*	C	20 34 58.80	+2.192	.	40 08 18.6	+12.55		1.0986	9.8921	9.9214	9.6058
1196	7161	6*	B	20 35 10.36	+2.021	.	45 13 33.0	+12.56	0.00	1.0991	9.8918	9.9340	9.6481
1197	7160	6.0	A	35 25.08	2.809	+0.001	14 08 22.1	12.58	+0.002	1.0997	9.8914	9.7860	9.1854
1198	XX, 270	7.0	C	35 44	2.8		13 21 53.1	12.60		1.1004	9.8909	9.7796	9.1631
1199	7166	6.5	C	35 46.18	1.554	.	55 33 54.6	12.60		1.1005	9.8909	9.9478	9.7147
1200	7164	6.5*	A	20 35 59.03	+2.425	+0.003	31 51 49.0	+12.62	−0.02	1.1010	9.8905	9.8914	9.5214
1201	7167	6.5	C	20 36 19.71	+2.242	.	38 38 16.5	+12.64	.	1.1018	9.8900	9.9157	9.5951
1202	7171	2.1*	AA	37 10.26	2.042	+0.001	44 50 04.4	12.70	+0.003	1.1038	9.8887	9.9311	9.6498
1203	7174	6.5	C	37 25.48	2.164		41 16 12.2	12.72		1.1048	9.8883	9.9223	9.6215
1204	XX, 283	6*	B	37 28.51	2.347	.	35 00 33.4	12.72	.	1.1045	9.8892	9.9025	9.5610
1205	7173	4*	A	20 37 37.35	+2.802	−0.001	14 37 38.7	+12.73	−0.039	1.1048	9.8880	9.7888	9.2050
1206	7176	6*	A	20 37 38.49	+1.278	. .	60 03 13.0	+12.73	−0.016	1.1048	9.8880	9.9475	9.7404
1207	7182	5.6*	A	38 21.42	1.848	+0.006	49 53 30.3	12.78	−0.01	1.1065	9.8868	9.9390	9.6879
1208	7189	7.0	C	39 10.49	1.493	.	56 56 11.1	12.83		1.1084	9.8856	9.9448	9.7295
1209	7188	5.6*	A	39 27.95	2 596	−0.002	24 49 27.4	12.85	−0.18	1.1090	9.8851	9.8549	9.4299
1210	7193	6*	B	20 39 59.58	+1.286		60 09 05.7	+12.89	0.00	1.1102	9.8843	9.9447	9.7463
1211	7198	6*	B	20 40 28.52	+1.981		46 50 38.6	+12.92		1.1113	9.8835	9.9318	9.6723
1212	7194	4.5*	A	40 30.09	2.475	.	30 15 51.6	12.92	+0.04	1.1113	9.8835	9.8809	9.5116
1213	7199	5	A	40 50.75	2.785	−0.002	15 40 31.1	12.95	−0.182	1.1121	9.8829	9.7952	9.2416
1214	7200	4*	A	40 51.57	2.785	−0.002	15 40 30.3	12.95	−0.182	1.1122	9.8829	9.7952	9.2417
1215	7204	3.2*	AA	20 41 09.24	+2.396	+0.031	33 30 11.0	+12.97	+0.327	1.1128	9.8824	9.8936	9.5527
1216	7211	6.5*	B	20 41 36.97	+0.761	+0.001	66 12 11.5	+13.00	+0.02	1.1139	9.8817	9.9404	9.7731
1217	T. Cygni.	Var.	B	42 11.37	2.388	. .	33 54 57.0	13.04	.	1.1151	9.8807	9.8943	9.5596
1218	7215	5*	A	42 14.83	1.499	−0.011	57 07 53.8	13.04	−0.245	1.1152	9.8822	9.9413	9.7374
1219	XX, 319	7.1	C	42 25	2.6		25 43 07.9	13.05	.	1.1156	9.8804	9.8576	9.4509
1220	7213	5.4*	AA	20 42 32.39	+2.333		36 01 56.0	+13.06	+0.002	1.1159	9.8806	9.9019	9.5833
1221	7218	6.7*	B	20 42 43.70	+1.748	−0.008	52 32 26.1	+13.07	−0.16	1.1163	9.8799	9.9374	9.7139
1222	7220	4.3*	A	42 44.66	1.215	+0.017	61 21 13.1	13.07	+0.815	1.1164	9.8798	9.9412	9.7575
1223	7219	7.0	C	43 03.48	2.054		45 07 17.5	13.09	. .	1.1170	9.8793	9.9258	9.6653
1224	7223	6*	B	43 40.19	2.855		12 04 44.0	13.13	+0.103	1.1184	9.8783	9.7652	9.1369
1225	A. Ö. 21126	6.7*	B	20 43 42.46	+1.974		47 22 18.5	+13.14	0.00	1.1185	9.8783	9.9293	9.6831
1226	7233	6.5*	A	20 44 40.81	+2.042	+0.001	45 39 03.7	+13.20	−0.016	1.1206	9.8767	9.9251	9.6728
1227	7241	6.5*	B	45 38.55	2.117	+0.012	43 35 20.7	13.26	+0.115	1.1227	9.8750	9.9198	9.6590
1228	7243	7.3	B	45 40.17	1.863		50 19 08.5	13.27		1.1227	9.8750	9.9315	9.7068
1229	XX, 358	6*	C	46 10	2.5		27 46 58.6	13.30	−0.03	1.1238	9.8742	9.8650	9.4901
1230	7246	5*	A	20 46 46.67	+2.571	−0.005	26 37 47.7	+13.34	−0.072	1.1251	9.8732	9.8589	9.4744
1231	F. 3606	6*	C	20 47 06	+1.1		63 34 34.3	+13.36		1.1258	9.8726	9.9350	9.7757
1232	Gr. 3311	6.8	C	47 20	1.8	.	51 55 37.0	13.37	.	1.1262	9.8722	9.9315	9.7201
1233	7253	5.6*	A	48 49.53	2.118	+0.001	43 54 53.0	13.47	+0.007	1.1294	9.8697	9.9172	9.6683
1234	7254	6*	B	48 56.52	2.091	. .	44 42 32.7	13.48	.	1.1296	9.8695	9.9187	9.6748
1235	7256	5.6*	AA	20 49 13.97	+2.555	+0.001	27 34 59.6	+13.50	0.00	1.1303	9.8690	9.8615	9.4937

(1183) 7131. No. 807 = B. A. C. 7132. It would probably be better to use P. M. − 0″.05 and declination 14″.0. Combined magnitude, 5*.
(1217) Maximum magnitude, 5*; minimum, 6*.
(1227) No. 839 = B. A. C. 7241. Two observations at Washington (1873) give 20″.9.

Cat. No.	Number and Catalogue.	Mag.	Class.	Right ascension, 1875.0.	Annual precession.	Proper motion.	Declination, 1875.0.	Annual precession.	Proper motion.	Log. a'.	Log. b'.	Log. c'.	Log. d'.
				h. m. s.			° ′ ″						
1236	Gr. 3328	7.0	C	20 49 25	+1.5	.	58 11 00.4	+13.51	. . .	1.1306	9.8686	9.9328	9.7578
1237	7259	7.5	B	49 28.02	2.120	+0.002	43 54 45.1	13.51	+0.013	1.1307	9.8686	9.9165	9.6697
1238	7257	6.5*	A	49 40.76	2.860	0.006	12 05 30.1	13.53	+0.012	1.1312	9.8682	9.7626	9.1502
1239	7258	6.5*	A	49 41.63	2.839	+0.002	13 14 44.8	13.53	−0.004	1.1312	9.8682	9.7720	9.1891
1240	7260	6.8	B	20 49 42.16	+2.236		40 13 40.8	+13.53		1.1312	9.8682	9.9074	9.6392
1241	7262	6.5	A	20 49 44.01	+1.711		54 02 17.5	+13.53	+0.17	1.1313	9.8681	9.9305	9.7373
1242	Gr. 3327	6.7*	C	49 50	1.9		49 03 33.4	13.54		1.1315	9.8679	9.9251	9.7075
1243	XX, 400	6.6	B	50 40.15	1.446		58 50 00.7	13.59	.	1.1332	9.8665	9.9313	9.7634
1244	XX, 401	6.7	B	51 32.64	2.128		43 53 42.6	13.65		1.1350	9.8650	9.9143	9.6738
1245	7268	6.7*	A	20 51 36.55	+2.023	.	46 56 21.3	+13.65	0.00	1.1352	9.8648	9.9198	9.6967
1246	7273	6.7	B	20 52 10.25	+2.113	.	44 26 41.4	+13.69	. . .	1.1363	9.8638	9.9146	9.6794
1247	7274	6.7*	B	52 20.54	1.959	. .	48 42 56.3	13.70	−0.093	1.1366	9.8636	9 9218	9.7103
1248	7271	6.5*	A	52 24.69	2.893	−0.004	10 21 28.6	13.70	0.058	1.1368	9.8634	9.7467	9.0894
1249	7278	6.4	C	52 27.70	1.898	+0.010	50 14 57.4	13.70	.	1.1369	9.8633	9.9236	9.7205
1250	7277	4*	A	20 52 30.84	+2.232	+0.003	40 41 12.4	+13.71	−0.003	1.1370	9.8632	9.9057	9.6490
1251	7275	6.5*	A	20 52 41.07	+2.680	. .	21 50 37.0	+13.72	−0.008	1.1373	9.8629	9.8287	9.4058
1252	7281	6.0	B	52 56.54	1.606	+0.003	56 24 24.5	13.73	−0.02	1.1378	9.8625	9.9279	9.7563
1253	7290	6.5*	A	53 51.00	2.135		43 59 06.6	13.79		1.1397	9.8608	9.9118	9.6792
1254	30 Heis. Del.	6*	C	54 02	2.8		16 20 21.6	13.80	.	1.1400	9.8605	9.7927	9.2871
1255	R. C. 5050	7.8	C	20 54 16	+2.1		43 55 50.3	+13.82	. .	1.1405	9.8601	9.9112	9.6796
1256	7294	6.5*	A	20 54 29.70	+1.919		49 58 37.6	+13.84		1.1410	9.8597	9.9208	9.7229
1257	31 Heis. Del.	6*	C	54 45	2.7	. .	18 50 42.3	13.85	. .	1.1415	9.8592	9.8090	9.3431
1258	7297	6.8	A	55 08.68	2.268	+0.020	39 45 52.7	13.88	+0.20	1.1423	9.8585	9.9005	9.6460
1259	7301	5.6*	A	55 34 46	2.037	−0.005	47 02 01.0	13.90	−0.018	1.1431	9.8577	9.9154	9.7053
1260	7310	6*	A	20 56 20.42	+1.482		58 57 02.3	+13.95	−0.03	1.1446	9.8563	9.9239	9.7753
1261	7306	5.6*	A	20 56 49.02	+2.090	−0.002	45 39 56.0	+13.98	0.00	1.1455	9.8554	9.9117	9.6978
1262	7313	6.4	A	57 33.34	2.297		39 01 00.7	14.03		1.1470	9.8541	9.8959	9.6438
1263	7317	6.8	B	57 56.21	2.140		44 17 53.7	14.05	−0.04	1.1477	9.8534	9.9078	9.6496
1264	XX, 453	7.0	C	58 10	2.6	.	28 35 54.5	14.07		1.1481	9.8529	9.8586	9.5260
1265	7320	6.7*	B	20 58 13.82	+2.323	+0.001	38 09 51.0	+14.07	+0.03	1.1483	9 8528	9.8929	9.6370
1266	7326	6.7*	B	20 59 11.31	+2.242		41 08 04.9	+14.13	−0.04	1.1501	9.8510	9.8996	9.6661
1267	7332	6*	C	20 59 58.39	1.826		52 47 19.2	14.18	.	1.1516	9.8495	9.9168	9.7506
1268	Gr. 3387	6.9	C	21 0 16	1.7	.	54 44 01.8	14.20	.	1.1522	9.8490	9.9176	9.7619
1269	7333	4*	A	0 23.06	2.176	+0.002	43 25 47.7	14.20	−0.003	1.1524	9.8487	9.9032	9.6875
1270	7336	5.0	AA	21 1 17.67	+2.332	+0.351	38 08 08.8	+14.26	+3.231	1.1541	9.8470	9.8896	9.6426
1271	7337	5.3	A	21 1 19.19	+2.332	+0.355	38 08 00.3	+14.26	+3.04	1.1541	9.8470	9.8895	9.6426
1272	F. 3689	7.0	A	1 33.53	1.461	. .	59 45 32.0	14.28		1.1546	9.8465	9.9166	9.7889
1273	7345	5.6*	A	2 17.78	2.062	−0.001	47 08 48.3	14.32	−0.01	1.1559	9.8451	9.9076	9.7190
1274	XXI, 1	6*	A	3 20.73	2.540		29 42 04.5	14.38	−0.04	1.1579	9.8431	9.8586	9.5508
1275	7354	7.5	A	21 4 53.11	+2.698		21 56 56.5	+14.48	0.00	1.1607	9.8400	9.8202	9.4312
1276	7356	6.5	A	21 4 54.21	+2.698	.	21 56 47.4	+14.48	0.00	1.1607	9.8400	9.8202	9.4312
1277	R. C. 5132	7.0	C	6 11	2.1	.	47 10 56.6	14.56	.	1.1630	9.8375	9.9028	9.7263
1278	7361	7.9	B	6 18.67	2.689		22 34 14.4	14.57	−0.04	1.1633	9.8372	9.8225	9.4453
1279	7365	6*	A	6 23.67	1.850		53 03 11.7	14.57	−0.025	1.1634	9.8370	9.9084	9.7639
1280	Gr. 3410	6.7*	C	21 6 48	+1.3		62 47 09.6	+14.59		1.1642	9.8362	9.9076	9.8110
1281	7368	3*	AA	21 7 37.02	+2.550	+0.002	29 42 54.4	+14.64	−0.07	1.1656	9.8346	9.8546	9.5587
1282	7373	6.7*	B	8 25.01	2.407	. .	36 07 05.5	14.69	. .	1.1670	9.8329	9.8760	9.6353
1283	7377	6*	A	8 37.23	1.530	0.000	59 28 22.7	14.70	−0.017	1.1674	9.8325	9.9064	9.8004
1284	7383	7.0	B	9 31.07	2.294		40 37 44.7	14.76	+0.05	1.1689	9.8307	9.8866	9.6805
1285	7387	7.5	A	21 9 36.29	+1.530	.	59 31 56.3	+14.76	−0.04	1.1691	9.8305	9.9050	9.8026
1286	7385	4*	A	21 9 48.12	+2.377	+0.018	37 30 45.9	+14.77	+0.447	1.1694	9.8301	9.8785	9.6515
1287	7398	4.5*	A	12 30.37	2.351		38 52 17.6	14.93	−0.02	1.1741	9.8244	9.8789	9.9696
1288	LL, 41419	6.5	C	12 39	2.4		38 41 19.5	14.94	.	1.1744	9.8241	9.8783	9.6681
1289	Gr. 3424	6*	C	12 39	2.3		42 09 37.9	14.94	.	1.1744	9.8241	9.8861	9.6990
1290	7399	4.5*	B	21 12 46.74	+2.462	+0.003	34 22 22.7	+14.95	−0.003	1.1746	9.8239	9.8660	9.6241
1291	XXI, 71	6.3	C	21 12 49	+2.9		10 40 39.8	+14.95		1.1746	9.8238	9.7403	9.1403
1292	XXI, 77	6.8	C	13 22	2.8	.	17 17 58.8	14.98	.	1.1756	9.8226	9.7867	9.3467
1293	7402	5*	B	13 47.38	2.230	−0.002	43 25 14.1	15.01	−0.015	1.1763	9.8217	9.8871	9.7113
1294	7401	6.0	B	13 30.00	1.790		55 16 24.5	14.99		1.1758	9.8223	9.8993	9.7884
1295	7411	6.5*	B	21 15 10.60	+2.059		48 58 56.4	+15.09		1.1786	9.8187	9.8931	9.7541
1296	7410	6*	A	21 15 25.30	+2.692	+0.009	23 19 49.1	+15.10	−0.15	1.1790	9.8182	9.8189	9.4746
1297	7416	3.2*	AA	15 35.68	1.414	+0.023	62 03 22.6	15.11	+0.031	1.1793	9.8178	9.8944	9.8233
1298	7417	6*	B	15 48.09	1.661	.	58 05 43.1	15.12	. .	1.1796	9.8174	9.8959	9.8063
1299	7418	4.5*	AA	16 18.34	2.765	+0.009	19 16 14.3	15.15	+0.067	1.1804	9.8163	9.7964	9.3968
1300	7428	5.6*	B	21 16 46.40	+1.253		64 20 32.6	+15.18	−0.004	1.1812	9.8153	9.8904	9.8340

(1245) 7268. B. A. C. 42 seconds in error in A. R.
(1271) 7337. The declination derived from the preceding component with Auwers's difference (derived from micrometer observations) is 38° 8′ 0′.′2.
(1286) 7385. I have assumed an error of 1″ in Von Asten's declination.

Cat. No.	Number and Catalogue.	Mag.	Class.	Right ascension, 1875.0.	Annual precession.	Proper motion.	Declination, 1875.0.	Annual precession.	Proper motion.	Log. a'.	Log. b'.	Log. c'.	Log. d'.
				h. m. s.			° ′ ″						
1301	7430	6*	A	21 17 20.99	+1.548		60 13 33.7	+15.21	0.00	1.1822	9.8140	9.8927	9.8185
1302	7431	6*	B	17 39.82	2.074		48 51 14.6	15.23	+0.07	1.1827	9.8133	9.8895	9.7573
1303	Gr. 3447	7.0	C	18 09	2.1		48 57 27.9	15.26		1.1834	9.8122	9.8890	9.7588
1304	7437	6*	A	18 20.89	+2.690	+0.010	23 44 16.9	15.26	0.00	1.1838	9.8118	9.8183	9.4864
1305	XXI, 133	7.3	C	21 19 00	+1.3		63 49 48.5	+15.30		1.1848	9.8103	9.8872	9.8357
1306	7444	6*	A	21 19 00.96	+2.656		25 38 15.9	+15.30		1.1848	9.8103	9.8265	9.5189
1307	7448	6.7	B	19 46.79	2.003		51 07 12.3	15.35	−0.03	1.1861	9.8086	9.8886	9.7751
1308	7449	7.7	A	19 48.15	1.331	+0.014	63 41 25.0	15.35	+0.064	1.1861	9.8085	9.8860	9.8364
1309	7450	6.7*	B	20 38.10	2.779		18 50 06.0	15.40		1.1874	9.8066	9.7906	9.3943
1310	7453	6*	A	21 20 40.54	+2.446	−0.001	36 07 41.1	+15.40	−0.017	1.1875	9.8065	9.8622	9.6559
1311	7455	6*	A	21 20 44.20	+2.179	+0.015	46 10 24.3	+15.40	+0.032	1.1876	9.8064	9.8822	9.7436
1312	7461	6.5*	A	22 09.61	2.637	+0.006	27 03 54.5	15.48	+0.021	1.1898	9.8032	9.8297	9.5457
1313	7462	5*	A	22 15.56	2.440		36 34 27.5	15.49		1.1900	9.8029	9.8615	9.6630
1314	7468	6*	B	22 37.63	1.972		52 21 22.0	15.51		1.1905	9.8021	9.8348	9.7870
1315	7465	6*	B	21 22 47.57	+2.548		31 40 42.6	+15.52	+0.03	1.1908	9.8017	9.8463	9.6089
1316	7469	7.6	C	21 22 55.38	+2.199	+0.005	45 52 23.1	+15.52		1.1910	9.8014	9.8792	9.7448
1317	8 Heis. Peg.	6*	C	23 17	2.7		21 38 03.8	15.54		1.1916	9.8005	9.8036	9.4560
1318	XXI, 159	7.1	C	23 19	2.2		46 01 03.1	15.55		1.1916	9.8005	9.8784	9.7465
1319	7476	6.7*	B	23 58.24	1.659		59 12 24.4	15.58	0.00	1.1926	9.7988	9.8823	9.8245
1320	7474	5.4*	A	21 24 17.14	+2.713	+0.004	23 05 30.6	+15.60	0.00	1.1931	9.7982	9.8099	9.4845
1321	7477	7.0	C	21 24 30.75	+2.267		43 47 30.7	+15.61		1.1935	9.7976	9.8736	9.7315
1322	7480	5*	A	24 50.17	2.204	+0.003	45 59 24.0	15.63	+0.106	1.1939	9.7969	9.8762	9.7486
1323	R. C. 5252	6.7	C	25 00	2.2		45 52 44.3	15.64		1.1942	9.7965	9.8760	9.7481
1324	11 Heis. Peg.	6*	B	25 06.78	2.900		11 35 22.0	15.64		1.1944	9.7963	9.7409	9.1952
1325	7482	6.5*	A	21 25 21.06	+1.172	−0.003	66 15 50.4	+15.66	−0.028	1.1949	9.7955	9.8729	9.8543
1326	7483	6*	C	21 26 10.57	+1.991		52 24 30.3	+15.70		1.1960	9.7937	9.8794	9.7928
1327	7493	3*	AA	27 02.32	0.796	+0.002	70 00 43.5	15.75	−0.018	1.1973	9.7917	9.8633	9.8681
1328	7488	6.8	B	27 01.01	2.026		51 38 35.2	15.75	+0.07	1.1973	9.7916	9.8777	9.7896
1329	7489	6*	C	27 15.36	2.011		52 04 08.3	15.76		1.1976	9.7911	9.8776	9.7924
1330	7494	6.8	B	21 27 25.70	+1.704	+0.019	58 51 57.4	+15.77	+0.04	1.1978	9.7907	9.8774	9.8281
1331	7495	6.5*	B	21 27 33.24	+1.647		59 54 31.3	+15.78		1.1980	9.7904	9.8760	9.8230
1332	7496	6.5	A	27 46.57	2.159		47 53 32.3	15.79		1.1984	9.7899	9.8741	9.7666
1333	7501	6.5	A	28 36.97	2.242		45 18 00.4	15.84		1.1996	9.7878	9.8700	9.7492
1334	XXI, 195	6.7*	C	28 51	2.7		22 12 26.0	15.85	−0.06	1.1999	9.7873	9.8016	9.4751
1335	7503	4*	B	21 29 16.80	+2.253	−0.003	45 02 23.3	+15.87	−0.096	1.2006	9.7862	9.8682	9.7482
1336	7505	5.6*	A	21 29 40.26	+2.435	+0.012	37 58 27.8	+15.89	+0.096	1.2011	9.7853	9.8557	9.6881
1337	7512	6.7*	C	30 08.89	2.062		51 08 31.5	15.92		1.2018	9.7841	9.8727	9.7910
1338	Gr. 3516	6.7	C	31 51	1.2		66 10 12.0	16.01		1.2043	9.7798	9.8611	9.8634
1339	7520	6.5*	A	31 54.50	2.798	+0.011	18 45 25.4	16.01	+0.020	1.2044	9.7797	9.7814	9.4095
1340	7521	5*	A	21 31 56.33	+2.399	+0.001	39 51 09.6	+16.01	+0.010	1.2044	9.7795	9.8566	9.7090
1341	Gr. 3517	6.7	C	21 32 04	+1.2		66 12 54.1	+16.02		1.2046	9.7793	9.8606	9.8639
1342	7524	6.7*	A	32 44.23	2.428		38 45 19.2	16.05		1.2056	9.7776	9.8534	9.7000
1343	D.M.50°,3382	7.1	C	32 54	2.1		50 30 09.6	16.06		1.2058	9.7772	9.8680	9.7910
1344	7528	6*	B	33 11.51	2.786		19 42 08.0	16.08		1.2062	9.7765	9.7853	9.4318
1345	7530	6.5	C	21 33 29	+2.0		53 28 46.4	+16.09		1.2066	9.7757	9.8679	9.8095
1346	7533	7.6	A	21 33 50.93	+1.591	+0.008	61 44 16.8	+16.11	+0.12	1.2071	9.7748	9.8632	9.8498
1347	Gr. 3524	6.7	C	34 00	2.1		49 13 56.0	16.12		1.2073	9.7744	9.8656	9.7845
1348	7542	5.6*	A	34 33.99	1.610		61 31 06.8	16.16	−0.01	1.2081	9.7729	9.8621	9.8500
1349	Gr. 3533	7.3	C	34 59	2.1		51 47 50.0	16.17		1.2087	9.7719	9.8652	9.8018
1350	7545	6*	A	21 35 04.95	+1.859	+0.002	56 55 26.9	16.17	−0.013	1.2088	9.7716	9.8645	9.8299
1351	7544	6.5*	A	21 35 16.80	+2.343	+0.005	42 42 25.0	16.19	+0.007	1.2091	9.7711	9.8569	9.7384
1352	7548	7.0	C	35 40.55	2.162		49 06 58.7	16.21		1.2097	9.7701	9.8629	9.7860
1353	7553	6*	A	36 26.53	2.929		10 15 19.0	16.25		1.2107	9.7681	9.7254	9.1591
1354	7554	6.3	B	36 32.64	2.408	+0.001	40 14 18.0	16.25	−0.04	1.2109	9.7678	9.8510	9.7189
1355	7555	6.0	C	21 36 34.85	+1.981		54 18 15.4	+16.25		1.2110	9.7676	9.8626	9.8184
1356	Gr. 3550	6.9	B	21 36 50.86	+1.760		59 11 02.1	+16.27		1.2113	9.7670	9.8600	9.8430
1357	7559	5.9	B	37 21.19	2.405	+0.001	40 30 25.4	16.29	−0.003	1.2120	9.7657	9.8504	9.7224
1358	Gr. 3549	7.6	C	37 31	2.4		40 28 38.4	16.30		1.2122	9.7652	9.8501	9.7224
1359	7560	5.4*	A	37 39.45	2.123	−0.001	50 37 11.0	16.31	−0.013	1.2124	9.7618	9.8603	9.7984
1360	Gr. 3554	7.1	B	21 37 43.89	+2.084		51 43 17.3	+16.31		1.2125	9.7647	9.8606	9.8052
1361	Gr. 3556	6.7*	C	21 38 06	+2.2		49 01 47.1	+16.33		1.2130	9.7637	9.8590	9.7888
1362	7565	6.5*	B	38 05.11	2.466		40 35 03.6	16.33	+0.02	1.2130	9.7637	9.8495	9.7231
1363	7566	6.5*	A	38 15.39	2.472	+0.001	37 42 43.5	16.34	0.00	1.2132	9.7633	9.8438	9.6976
1364	Rü. 9430	7.2	B	38 26.61	2.472		37 44 01.2	16.35		1.2135	9.7628	9.8437	9.6982
1365	22 Heis. Peg.	6.5*	C	21 38 30	+2.9		14 12 11.8	+16.35		1.2135	9.7626	9.7502	9.3012

(1319) 7476. The A. R. is very uncertain; the declinations do not well agree.
(1355) No. 425 = B. A. C. 7555. A P. M. of −0″.03 is indicated by two observations made at Washington in 1873. The declination becomes 14″.6.

Cat. No.	Number and Catalogue.	Mag.	Class.	Right ascension, 1875.0.	Annual precession.	Proper motion.	Declination, 1875.0.	Annual precession.	Proper motion.	Log. a'.	Log. b'.	Log. c'.	Log. d'.
				h. m. s.			° ′ ″						
1366	7568	} 4.5*	A	21 38 33.09	+2.657	+0.019	28 10 43.3	+16.36	—0.286	1.2136	9.7625	9.8168	9.5856
1367	7569	}	A	38 33.45	2.657	0.019	28 10 41.0	16.36	—0.268	1.2136	9.7625	9.8167	9.5856
1368	7567	4.5*	B	38 35.56	2.838	+0.003	16 46 39.5	16.36	+0.002	1.2136	9.7624	9.7653	9.3719
1369	7570	7.7	B	38 46.53	2.656	. .	28 12 36.8	16.36	—0.08	1.2139	9.7619	9.8166	9.5863
1370	7571	4*	A	21 38 59.01	+2.710	—0.002	25 04 16.5	+16.37	+0.01	1.2142	9.7613	9 8045	9.5391
1371	7582	4* to 5*	B	21 39 40.89	+1.832		58 12 26.4	+16.41	.	1.2151	9.7594	9.8556	9.8423
1372	7584	7.0	A	40 16.53	2.714	. . .	25 00 29.2	16.44	. .	1.2159	9.7579	9.8030	9.5398
1373	7585	5.6*	A	40 19.32	2.756	+0.004	22 22 24.4	16.44	—0.008	1.2160	9.7577	9.7918	9.4943
1374	7586	6.8*	B	40 42.52	2.715	+0.013	24 59 07.0	16.46	+0.023	1.2165	9.7567	9.8024	9.5400
1375	7589	7.1	C	21 40 48.30	+2.105	.	51 41 32.5	+16.47	.	1.2166	9.7562	9.8553	9.8091
1376	7590	6.0	A	21 41 08.00	+2.844	+0.007	16 37 02.1	+16.48	—0.03	1.2170	9.7555	9.7625	9.3711
1377	7593	6.5	C	41 18.70	2.375		42 29 01.3	16.49		1.2172	9.7550	9.8477	9.7446
1378	R. C. 5390	6.7*	C	41 27	1.6	. .	61 53 06.4	16.50	.	1.2174	9.7546	9.8487	9.8607
1379	7595	5*	A	41 50.59	1.729	0.005	60 32 39.8	16.52	—0.005	1.2180	9.7536	9.8495	9.8557
1380	7598	4.5*	A	21 42 10.55	+2.209	+0.001	48 43 54.3	+16.53	—0.015	1.2184	9.7526	9.8521	9.7922
1381	7602	7.7	A	21 43 08.13	+2.476		38 22 34.9	+16.58		1.2196	9.7500	9.8384	9.7103
1382	194 Heis. Cyg.	6*	C	43 18	2.5	.	38 04 05.8	16.59	. .	1.2198	9.7495	9.8376	9.7077
1383	7605	6*	B	43 44.05	1.768	—0.001	60 06 46.5	16.61	—0.017	1.2204	9.7483	9.8463	9.8563
1384	A. Ö. 22896	7.0	C	43 52	1.8	. .	59 07 13.4	16.62	. .	1.2208	9.7480	9.8470	9.8521
1385	7606	6.5*	A	21 44 11.82	+2.847	+0.007	16 42 18.9	+16.63	—0.071	1.2210	9.7470	9.7605	9.3774
1386	7607	5*	A	21 44 18.88	+2.647	.	29 35 34.8	+16.64	—0.023	1.2211	9.7467	9.8148	9.6126
1387	R. C. 5408	6*	C	44 35	2.4	.	40 33 59.8	16.65	. .	1.2215	9.7459	9.8400	9.7325
1388	7610	6.7*	A	44 48.55	1.075	.	69 34 16.5	16.66	—0.005	1.2218	9.7453	9.8278	9.8914
1389	7611	6.5	A	45 06.08	1.509		64 35 19.8	16.68		1.2221	9.7445	9.8374	9.8758
1390	7612	6.7	C	21 45 36.50	+2.120		52 06 50.8	+16.70	.	1.2228	9.7430	9.8471	9.8178
1391	7615	6.7*	C	21 45 39.54	+1.754	+0.002	60 41 26.5	+16.71	—0.034	1.2229	9.7428	9.8418	9.8612
1392	XXI, 312	6*	C	45 42	2.8		19 14 29.3	16.71	+0.03	1.2229	9.7428	9.7723	9.4386
1393	7614	6.5	B	45 54.75	2.474		38 57 07.3	16.72	. .	1.2232	9.7421	9.8354	9.7194
1394	7621	6.7*	C	46 14.35	1.399		66 12 40.9	16.73	—0.006	1.2236	9.7412	9.8320	9.8828
1395	Gr. 3594	7.5	C	21 46 35	+1.5		64 38 58.2	+16.75		1.2240	9.7402	9.8336	9.8779
1396	7623	6*	B	21 46 55.12	+2.678	—0.003	28 12 33.7	+16.76	—0.063	1.2244	9.7392	9.8073	9.5968
1397	7627	5.6*	AA	47 22.49	2.725	+0.001	25 20 15.9	16.79	—0.004	1.2250	9.7379	9.7967	9.5542
1398	36 Heis. Pegasi	6.5*	C	47 44	2.8		19 04 47.2	16.80		1.2254	9.7369	9.7697	9.4376
1399	7631	6*	B	47 47.40	2.023		55 12 34.8	16.82		1.2255	9.7367	9.8423	9.8378
1400	Gr. 3601	7.0	C	21 48 13	+2.120		54 27 08.1	+16.83		1.2260	9.7355	9.8418	9.8343
1401	Gr. 3608	6.7*	C	21 48 30	+1.5	.	65 09 58.8	+16.84		1.2264	9.7347	9.8292	9.8821
1402	7636	7.2	B	48 54.35	2.013	.	55 37 25.5	16.86	.	1.2269	9.7335	9.8400	9.8413
1403	7637	6.5	A	48 57.02	2.097	—0.001	53 24 31.1	16.86	—0.003	1.2269	9.7333	9.8408	9.8284
1404	Gr. 3609	6.7*	C	49 02	1.7	.	62 07 25.4	16.87	. .	1.2270	9.7331	9.8331	9.8713
1405	7642	7.2	A	21 50 33.19	+2.110	+0.021	53 20 27.7	+16.94	+0.052	1.2288	9.7286	9.8379	9.8310
1406	7643	6*	A	21 50 41.12	+2.010	.	56 01 10.6	+16.94	—0.03	1.2290	9.7282	9.8363	9.8455
1407	7641	6.5*	A	50 50.71	2.926	+0.001	11 29 01.3	16.95	—0.009	1.2292	9.7277	9.7256	9.2261
1408	7646	6.5	C	51 06.92	2.137		52 39 02.9	16.96	.	1.2295	9.7269	9.8370	9.8277
1409	7651	6.5	A	51 36.13	1.792		60 56 57.2	16.99	0.00	1.2301	9.7254	9.8294	9.8696
1410	R. C. 5476	6.9	C	21 52 11	+2.3		45 59 52.6	+17.01		1.2308	9.7236	9.8339	9.7855
1411	R. C. 5483	7.0	C	21 52 30	+1.9		59 12 04.4	+17.03	. .	1.2312	9.7227	9.8298	9.8630
1412	Rü. 9704	8.7	C	52 53	2.9		11 35 50.3	17.05	. .	1.2316	9.7215	9.7250	9.2327
1413	7658	6.5*	A	53 07.72	1.690	.	63 01 50.3	17.06	—0.02	1.2319	9.7208	9.8230	9.8798
1414	Arg. 224	7.4	B	53 08.95	2.678	—0.029	29 13 45.7	17.06	0.407	1.2319	9.7207	9.8030	9.6185
1415	7664	6*	A	21 54 59.99	+2.917	+0.006	12 31 18.8	+17.14	—0.059	1.2341	9.7150	9.7292	9.2680
1416	7668	1.7	B	21 55 12.02	+2.003	+0.010	57 03 37.5	+17.15	—0.03	1.2343	9.7144	9.8266	9.8560
1417	XXI, 369	7.8	C	55 29	2.7	.	26 13 47.0	17.16	0.04	1.2346	9.7135	9.8908	9.5779
1418	7674	6.5*	A	57 10.98	2.941	+0.001	10 47 00.9	17.24	—0.001	1.2366	9.7081	9.7175	9.2065
1419	7676	6*	B	57 15.74	2.189		52 16 48.5	17.24		1.2366	9.7078	9.8255	9.8337
1420	7679	6.8	C	21 57 36.39	+2.454	.	42 12 41.9	+17.26		1.2370	9.7067	9.8218	9.7622
1421	7683	6*	B	21 57 52.46	+2.009	—0.003	57 23 51.9	+17.27	—0.014	1.2373	9.7059	9.8207	9.8607
1422	7681	6.5*	C	57 54.10	2.414	.	44 02 53.2	17.27	.	1.2374	9.7058	9.8228	9.7774
1423	7696	6.7*	A	59 49.61	1.948	+0.005	59 12 32.2	17.36	0.018	1.2395	9.6995	9.8144	9.8714
1424	7693	6*	A	59 54.91	2.710	+0.001	28 21 26.9	17.36	—0.003	1.2396	9 6993	9.7920	9.6141
1425	7695	6.5	C	21 59 59.16	+2.364		46 37 36.5	+17.37		1.2397	9.6990	9.8206	9.7990
1426	7698	6.6	B	22 0 08.15	+1.948	.	59 15 39.7	+17.37	. . .	1.2398	9.6985	9.8136	9.8719
1427	7699	5.9	B	0 08.19	1.788	—0.007	62 30 42.5	17.37	+0.016	1.2398	9.6985	9.8035	9.8857
1428	7700	5.4*	A	0 10.00	1.701		64 01 08.4	17.37	+0.064	1.2399	9.6984	9.8055	9.8914
1429	Gr. 3680	6.5	A	0 57.22	2.345		47 37 25.5	17.41		1.2407	9.6958	9.8190	9.8070
1430	7705	6.5*	B	22 0 58.29	+2.421		44 24 25.6	+17.41		1.2408	9.6958	9.8177	9.7836

(1371) 7582. The variable μ Cephei.
(1381) 7602. A. R. relatively uncertain; the declinations are very numerous, but do not agree well.
(1395) Gr. 3594. Declination quite uncertain.
(1418) No. 971 = B. A. C. 7676. Two observations at Washington (1873) give 48″.0.
(1428) = B. A. C. 7700: following star. Companion is $0^s.98$ preceding and 2″.0 north.

Cat. No.	Number and Catalogue.	Mag.	Class.	Right ascension, 1875.0.	Annual precession.	Proper motion.	Declination, 1875.0.	Annual precession.	Proper motion.	Log. a'.	Log. b'.	Log. c'.	Log. d'.
				h. m. s.			° ′ ″						
1431	7706	4*	A	22 1 11.54	+2.766	+0.022	24 44 07.2	+17.42	+0.026	1.2410	9.6950	9.7694	9.5128
1432	7707	6.5*	A	1 12.48	1.816	−0.003	62 10 34.0	17.42	+0.035	1.2410	9.6950	9.8066	9.8855
1433	7708	6.5*	A	1 17.97	1.843	+0.009	61 40 19.4	17.42	−0.04	1.2411	9.6947	9.8073	9.8835
1434	7712	6	A	1 58.16	2.817	+0.001	21 05 42.7	17.45	−0.064	1.2418	9.6924	9.7650	9.4959
1435	Gr. 3690	6.2	C	22 2 48	+2.2		52 41 49.5	+17.49		1.2427	9.6897	9.8144	9.8412
1436	7718	6.7	C	22 2 57.10	+2.016		58 13 51.4	+17.49		1.2429	9.6891	9.8089	9.8702
1437	7721	5.7*	A	3 41.40	2.656	−0.003	32 33 44.0	17.53	−0.066	1.2436	9.6866	9.7974	9.6722
1438	7727	6.9	C	3 44.37	2.367		47 19 21.4	17.53		1.2437	9.6865	9.8138	9.8089
1439	7736	6.5	B	4 21.86	2.009		58 40 52.8	17.55		1.2444	9.6843	9.8052	9.8738
1440	7731	4*	A	22 4 26.22	+2.659		32 33 55.3	+17.56	−0.016	1.2444	9.6841	9.7964	9.6733
1441	7737	7.6	C	22 4 34.89	+2.476		42 34 24.6	+17.56		1.2446	0.6836	9.8102	9.7727
1442	7733	6*	A	4 35.75	2.832		20 21 52.4	17.56	+0.014	1.2446	9.6835	9.7594	9.4840
1443	7738	8.0	A	4 45.04	2.030		58 14 21.4	17.57		1.2448	9.6830	9.8049	9.8722
1444	7742	6.3	A	5 49.13	2.895		15 25 31.5	17.62		1.2459	9.6793	9.7367	9.3686
1445	7743	6.7	C	22 5 51.97	+2.487		42 24 59.4	+17.62		1.2459	9.6791	9.8079	9.7728
1446	7746	5.6*	B	22 6 18.60	+2.307	+0.018	50 12 22.3	+17.64		1.2464	9.6776	9.8085	9.8298
1447	7749	3.4*	A	6 31.10	2.071	0.002	57 35 07.9	17.64	−0.008	1.2466	9.6768	9.8019	9.8709
1448	7753	6.5*	B	7 16.02	2.645		33 59 19.8	17.68	−0.05	1.2473	9.6742	9.7950	9.6926
1449	7755	6.5*	B	7 16.28	2.029	0.007	58 47 53.9	17.68	−0.028	1.2474	9.6742	9.7984	9.8773
1450	7754	6*	B	22 7 18.11	+2.127	+0.023	56 13 05.7	+17.68	+0.112	1.2474	9.6741	9.8019	9.8649
1451	Gr. 3715	6.3	C	22 7 38	+2.0		58 27 50.9	+17.69		1.2477	9.6729	9.7982	9.8762
1452	7760	6*	A	7 47.39	1.388	−0.009	69 30 55.1	17.70		1.2479	9.6724	9.7726	9.9174
1453	7759	6*	B	7 54.05	1.977		60 08 28.9	17.70		1.2480	9.6720	9.7948	9.8840
1454	7757	6*	B	7 55.08	2.737		27 59 22.0	17.70		1.2480	9.6719	9.7808	9.6173
1455	7766	6*	B	22 8 28.67	+1.861	−0.016	62 40 23.8	+17.72	−0.05	1.2486	9.6699	9.7886	9.8950
1456	7765	5*	A	22 8 30.78	+2.563		39 05 43.3	+17.73		1.2486	9.6698	9.8004	9.7462
1457	Gr. 3717	6*	C	8 41	2.4		44 49 16.5	17.73		1.2488	9.6692	9.8040	9.7947
1458	7770	6*	C	9 29.21	2.506		42 20 05.0	17 77		1.2496	9.6663	9.8014	9.7757
1459	7775	7.0	A	9 53.89	1.882	−0.007	62 32 33.0	17.78	−0.014	1.2500	9.6648	9.7854	9.8959
1460	7778	5.4*	A	22 10 26.12	+2.145	+0.056	56 25 14.4	+17.80		1.2505	9.6628	9.7947	9.8690
1461	7777	5.4*	A	22 10 31.28	+2.606	−0.004	37 07 36.7	+17.81	0.00	1.2506	9.6625	9.7948	9.7292
1462	Arg. 228	7.0	B	11 00.35	2.939	+0.057	12 16 18.1	17.83	+0.052	1.2511	9.6607	9.7171	9.2764
1463	7782	6.5	C	11 55.73	2.150		56 35 49.0	17.86		1.2520	9.6573	9.7910	9.8714
1464	XXII, 60	6.8	C	12 48	2.9		19 20 19.7	17.90	−0.04	1.2528	9.6541	9.7472	9.4707
1465	XXII, 65	6.7*	B	22 13 27.32	+2.617		37 08 31.8	+17.92	+0.06	1.2534	9.6516	9.7900	9.7322
1466	7786	7.0	B	22 13 31.76	+1.757		65 30 13.2	+17.93	0.00	1.2535	9.6513	9.7691	9.9104
1467	7787	7.5	C	13 48.28	2.305		52 01 49.5	17.94		1.2538	9.6503	9.7919	9.8483
1468	7789	6.7*	B	14 08.02	1.942	+0.003	62 10 41.1	17.95	+0.005	1.2541	9.6490	9.7757	9.8986
1469	XXII, 69	6.5	C	14 36	2.9		13 24 20.3	17.97		1.2545	9.6472	9.7201	9.3176
1470	R. C. 5653	6.8	B	22 15 06.24	+2.066		59 31 14.0	+17.99		1.2550	9.6453	9.7788	9.8882
1471	7796	5*	A	22 15 21.91	+2.950		11 34 33.7	+18.00	−0.007	1.2552	9.6443	9.7106	9.2556
1472	7799	6.7*	C	15 30.97	2.189		56 17 24.1	18.00		1.2554	9.6437	9.7832	9.8733
1473	7798	5*	A	15 33.06	2.762		27 42 05.3	18.00	0.00	1.2554	9.6436	9.7699	9.6206
1474	7800	5.4*	B	15 51.80	2.465		45 54 26.8	18.02	−0.022	1.2557	9.6424	9.7904	9.8098
1475	Gr. 3750	6.7*	C	22 16 30	+2.6		41 26 54.3	+18.04		1.2563	9.6399	9.7882	9.7749
1476	7803	8.0	B	22 16 41.66	+2.526		43 06 57.2	+18.05	−0.03	1.2565	9.6391	9.7885	9.7890
1477	7807	6.7*	A	17 34.70	2.858	+0.024	20 13 02.0	18.09	−0.021	1.2573	9.6354	9.7454	9.4937
1478	7810	6.7*	A	18 02.01	1.774	+0.007	66 04 30.9	18.10	0.00	1.2577	9.6339	9.7554	9.9165
1479	7812	6.7	B	18 23.54	2.200		56 39 10.8	18.11		1.2580	9.6324	9.7759	9.8777
1480	7813	7.2	B	22 18 25.42	+2.242		55 19 52.4	+18.11	−0.02	1.2580	9.6323	9.7778	9.8710
1481	7815	5.4*	AA	22 18 38.78	+2.349		51 36 11.7	+18.12	−0.195	1.2582	9.6314	9.7817	9.8502
1482	7820	5*	B	19 26.90	2.421	−0.003	48 50 34.7	18.15	−0.03	1.2589	9.6282	9.7820	9.8335
1483	7824	7.0	C	20 03.14	2.383		50 37 16.1	18.18	+0.003	1.2595	9.6257	9.7794	9.8465
1484	7825	7.6	C	20 22.02	2.406		49 46 01.8	18.19		1.2598	9.6244	9.7794	9.8404
1485	Gr. 3771	7.1	C	22 20 55	+2.3		53 10 52.0	+18.21		1.2602	9.6222	9.7749	9.8614
1486	Gr. 3772	7.1	C	22 21 02	+2.3		53 18 32.9	+18.21		1.2603	9.6217	9.7744	9.8623
1487	7829	7.0	B	21 35.85	1.993		62 41 33.4	18.23		1.2608	9.6194	9.7551	9.9074
1488	18 Heis. Lacer.	6*	C	21 58	2.6		39 10 25.6	18.24		1.2612	9.6179	9.7770	9.7595
1489	XXII, 113	6.5*	B	22 02.74	2.735		31 12 06.1	18.25		1.2612	9.6175	9.7678	9.6734
1490	Gr. 3779	7.3	C	22 22 43	+2.4		50 51 20.8	+18.27		1.2618	9.6147	9.7733	9.8493
1491	Gr. 3780	7.0	C	22 22 54	+2.4		50 56 18.6	+18.28		1.2620	9.6140	9.7728	9.8499
1492	7837	6.5*	B	23 04.14	1.921	−0.001	64 29 42.4	18.29	−0.006	1.2621	9.6133	9.7461	9.9154
1493	7843	6.5*	A	24 18.83	2.733	+0.002	31 56 00.1	18.33	−0.012	1.2631	9.6080	9.7654	9.6844
1494	7845	5*	B	24 19.37	2.489	−0.002	47 04 02.6	18.33	−0.03	1.2632	9.6079	9.7726	9.8256
1495	7846	6.5	C	22 24 28.72	+2.337		53 36 23.4	+18.34		1.2633	9.6073	9.7659	9.8669

(1439) B. A. C. 7736. The north preceding of a pair of nearly equal stars.
(1463) B. A. C. 7782. Declination confirmed by Washington, 1874, which gives 49″.5 from two observations.
(1495) B. A. C. 7846. Declination confirmed by Washington, 1874, which gives 23″.6 from two observations.

Cat. No.	Number and Catalogue.	Mag.	Class.	Right ascension, 1875.0.	Annual precession.	Proper motion.	Declination, 1875.0.	Annual precession.	Proper motion.	Log. a'.	Log. b'.	Log. c'.	Log. d'.
				h. m. s.			° ′ ″						
1496	7847	7.5	A	22 24 30.98	+2.213	+0.008	57 45 52.0	+18.34	—0.036	1.2633	9.6071	9.7587	9.8885
1497	7848	Var.	A	24 31.92	2.213	+0.002	57 46 32.4	18.34	0.023	1.2633	9.6070	9.7586	9.8885
1498	7850	5*	B	25 05.57	—0.002	42·28 59.1	18.36	—0.01	1.2638	9.6046	9.7721	9.7912	
1499	7855	4*	A	26 08.64	2.445	+0.014	49 38 25.0	18.39	0.00	1.2647	9.6001	9.7667	9.8445
1500	7856	6*	A	22 26 33.09	+2.882	+0.012	19 35 11.4	+18.41	+0.007	1.2650	9.5983	9.7338	9.4882
1501	7858	6*	A	22 26 54.92	+2.641		39 08 14.2	+18.42	—0.02	1.2653	9.5967	9.7678	9.7633
1502	7871	6.7*	B	28 49.67	2.304	.	55 58 42.4	18.49		1.2668	9.5882	9.7512	9.8832
1503	7875	6.7*	C	29 24.01	2.137	. .	61 07 58.9	18.51	+0.04	1.2673	9.5856	9.7378	9.9075
1504	7876	6.7*	A	29 25.52	1.711	+0.020	69 16 00.5	18.51	0.065	1.2673	9.5855	9.7107	9.9361
1505	7878	6.2	B	22 29 44.96	+1.682	+0.008	69 43 42.4	+18.52	+0.01	1.2676	9.5840	9.7078	9.9376
1506	XXII, 158	6.3	C	22 29 48	+2.9	.	19 37 53.6	+18.52	—0.12	1.2676	9.5838	9.7304	9.4918
1507	7879	6.6	A	30 18.55	2.658		38 58 54.2	18.54	0.02	1.2680	9.5814	9.7614	9.7646
1508	7880	6.1	A	30 18.71	2.658		38 59 16.4	18.54	—0.02	1.2680	9.5814	9.7614	9.7646
1509	7882	6.3	C	30 41.93	2.478	.	49 25 26.3	18.55	.	1.2683	9.5796	9.7564	9.8467
1510	7888	5.6*	B	22 32 14.52	+2.456	—0.003	50 54 00.7	+18.60	—0.114	1.2695	9.5724	9.7510	9.8577
1511	7893	6*	A	22 32 49.66	+2.901	—0.004	18 52 33.6	+18.62	—0.093	1.2700	9.5697	9.7248	9.4777
1512	7894	6.8	B	32 53.01	2.583		44 32 01.7	18.62		1.2700	9.5694	9.7555	9.8138
1513	Gr. 3845	6.7	C	33 14	2.1	. .	63 07 11.5	18.63	.	1.2703	9.5677	9.7209	9.9185
1514	Gr. 3843	6.7	B	33 18.48	2.600	+0.028	43 39 43.8	18.63	+0.06	1.2703	9.5674	9.7550	9.8072
1515	7901	5*	A	22 33 39.25	+2.681	+0.001	38 24 00.4	+18.65	—0.011	1.2706	9.5656	9.7547	9.7616
1516	7900	6*	A	22 33 43.70	+2.902	.	19 01 51.4	+18.65	.	1.2706	9.5654	9.7243	9.4818
1517	7902	5.6*	A	34 13.15	2.115	—0.002	62 56 05.7	18.66	—0.035	1.2710	9.5630	9.7185	9.9185
1518	Gr. 3849	7.2	C	34 31	2.6		40 39 46.2	18.67		1.2712	9.5616	9.7532	9.7830
1519	XXII, 186	6*	C	34 40	2.9	. .	13 53 52.6	18.68	+0.10	1.2713	9.5609	9.7062	9.3496
1520	7906	5*	A	22 35 02.02	+2.609	+0.006	43 37 26.9	+18.69	+0.004	1.2716	9.5591	9.7513	9.8082
1521	7908	3.4*	AA	22 35 13.64	+2.984	+0.004	10 10 45.9	+18.70	—0.020	1.2717	9.5581	9.6910	9.2169
1522	7913	7.3	B	35 42.68	2.601		44 21 21.5	18.71	+0.03	1.2721	9.5557	9.7494	9.8145
1523	7912	6.5*	B	35 47.10	2.952	. .	13 51 51.5	18.71	.	1.2722	9.5554	9.7053	9.3295
1524	7915	6*	A	35 53.01	2.674	+0.003	39 34 22.9	18.72	—0.004	1.2722	9.5549	9.7506	9.7742
1525	7914	5*	A	22 35 53.44	+2.809	+0.002	28 39 20.1	+18.72	—0.032	1.2722	9.5549	9.7426	9.6509
1526	7917	6.1	C	22 36 00.72	+2.656	. .	40 53 39.7	+18.72	+0.07	1.2722	9.5543	9.7502	9.7867
1527	Arg. 233	7.1	A	36 37.47	2.010	+0.035	65 54 24.9	18.74	+0.372	1.2728	9.5512	9.7008	9.9308
1528	7923	3*	A	37 08.65	2.803	+0.003	29 34 04.8	18.76	—0.04	1.2731	9.5486	9.7419	9.6640
1529	Gr. 3867	7.5	C	38 10	2.6		43 52 31.9	18.79		1.27.9	9.5435	9.7443	9.8125
1530	7931	6*	C	22 38 26.78	+2.696		38 48 39.5	+18.80		1.2741	9.5420	9.7454	9.7690
1531	7932	6*	A	22 38 31.14	+2.664		41 09 49.0	+18.80	+0.014	1.2741	9.5417	9.7449	9.7903
1532	Gr. 3873	7.0	C	39 13	2.7	.	38 32 44.9	18.82	.	1.2746	9.5381	9.7438	9.7669
15 3	7937	6*	A	39 23.35	2.912	—0.001	18 42 29.4	18.83	+0.072	1.2747	9.5372	9.7172	9.4787
1534	Gr. 3877	7.0	C	39 37	2.5	. .	51 51 36.7	18.83	.	1.2749	9.5361	9.7310	9.8684
1535	XXII, 214	7.2	B	22 39 44.78	+2.808	—0.023	29 47 52.4	+18.84	—0.373	1.2750	9.5354	9.7380	9.6691
1536	7943	5.4*	A	22 40 26.85	+2.978	+0.013	11 31 56.7	+18.86	—0.473	1.2755	9.5317	9.6930	9.2742
1537	7945	4*	A	40 30.64	2.879	0.003	22 54 30.0	18.86	—0.013	1.2755	9.5314	9.7259	9.5636
1538	7948	6.7*	C	40 37.74	2.634	+0.015	43 53 14.2	18.86	.	1.2756	9.5308	9.7388	9.8143
1539	7950	6.5	B	40 53.11	2.610	. .	45 33 29.2	18.87	—0.03	1.2757	9.5294	9.7367	9.8273
1540	7953	6.7*	B	22 42 25.68	+2.365	+0.006	57 49 26.0	+18.91	0.00	1.2768	9.5212	9.7094	9.9022
1541	7958	4*	A	22 43 58.24	+2.878	—0.001	23 56 31.3	+18.96	—0.05	1.2778	9.5128	9.7232	9.5840
1542	XXII, 232	6.7*	C	44 32	2.9		18 28 49.2	18.97		1.27?2	9.5097	9.7110	9.4770
1543	7961	5.9	B	44 36.81	2.449		55 14 23.6	18.98		1.2782	9.5092	9.7099	9.8907
1544	7962	6*	C	44 43.64	2.692	.	41 17 30.9	18.98	—0.01	1.2783	9.5086	9.7315	9.7966
1545	7963	6.7*	B	22 44 45.62	+2.009	+0.020	67 54 27.8	+18.98	+0.10	1.2783	9.5085	9.6643	9.9430
1546	Gr. 3901	6.7	C	22 44 48	+2.6		50 00 55.4	+18.98		1.2784	9.5082	9.7208	9.8605
1547	R. C. 5853	7.0	C	45 10	2.1	.	65 53 33.2	18.99		1.2786	9.5062	9.6721	9.9368
1548	7964	8	B	45 11.04	2.970	+0.021	13 18 03.0	18.99	+0.23	1.2786	9.5061	9.6955	9.3383
1549	7967	3.4*	A	45 14.05	2.129	—0.012	65 32 35.0	18.99	—0.144	1.2786	9.5058	9.6734	9.9357
1550	L. L. 44750	7.0	C	22 45 47	+2.6		48 04 14.8	+19.01		1.2790	9.5027	9.7215	9.8483
1551	7972	6.5*	A	22 46 23.91	+2.682	+0.010	42 38 54.1	+19.03	+0.01	1.2794	9.4992	9.7267	9.8081
1552	7973	6*	A	46 30.14	2.310		61 01 56.5	19.03	+0.027	1.2794	9.4986	9.6866	9.9192
1553	7975	6.5*	A	46 53.17	2.949		16 10 42.3	19.04		1.2797	9.4964	9.7025	9.4225
1554	Gr. 3913	7.4	C	47 15	2.6		50 02 29.8	19.05		1.2799	9.4943	9.7143	9.8623
1555	7978	6.7	C	22 47 28.76	+2.728		39 30 13.5	+19.06		1.2800	9.4930	9.7265	9.7814
1556	A. Ö. 24834	6.3	C	22 48 04	+2.4		59 26 11.5	+19.07		1.2804	9.4896	9.6870	9.9133
1557	7983	6.7*	B	48 04.66	2.671		44 05 05.7	19.07		1.2804	9.4895	9.7213	9.8207
1558	7984	6*	B	48 22.90	2.730		39 42 38.5	19.08	0.00	1.2806	9.4878	9.7245	9.7849
1559	43 Heis Lacer.	6*	C	49 55	2.8	.	35 41 04.8	19.12	. .	1.2815	9.4786	9.7227	9.7453
1560	7994	6.5*	A	22 50 41.31	+2.726	—0.001	40 56 13.4	+19.14	—0.002	1.2820	9o4740	9.7185	9.7962

(1496. 1497) 7847, 7848. Maximum, with comp., 3.7m.*; minimum, 4.9m.*

(1502) 7871. A. R. uncertain.

(1519) Pi. XXII, 186. Including late Greenwich observations we have decl. 13° 53′ 33″.7+0″.12 ($t-1875$), Class A. The A. R. will be about $22^h\ 34^m\ 41^s.08 + 0^s.020\ (t-1875)$.

(1558) 7984. A. R. very uncertain.

Cat. No.	Number and Catalogue.	Mag.	Class.	Right ascension, 1875.0.	Annual precession.	Proper motion.	Declination, 1875.0.	Annual precession.	Proper motion.	Log. a'.	Log. b'.	Log. c'.	Log. d'.
				h. m. s.			° ′ ″						
1561	7995	6.5*	B	22 50 57.39	+2.614	.	49 03 59.2	+19.15	−0.03	1.2821	9.4720	9.7062	9.8582
1562	7997	6.5*	A	51 19.61	2.927	+0.017	20 05 56.7	19.16	+0 06	1.2824	9.4701	9.7066	9.5163
1563	7999	5.6*	A	51 33.26	2.634		48 00 59.6	19.16	−0.02	1.2825	9.4687	9.7067	9.8515
1564	Gr. 3935	7	C	51 50	2.8	. .	38 43 16.8	19.17	+0.05	1.2827	9.4670	9.7175	9.7768
1565	Gr. 3936	6.5	C	22 51 54	+2.8		38 38 27.6	+19.17	.	1.2827	9.4665	9.7175	9.7760
1566	8003	6*	A	22 52 56.63	+2.996	+0.001	11 03 40.9	+19.20	−0.042	1.2833	9.4600	9.6823	9.2641
1567	8013	6.5	B	54 01.98	2.436	.	59 08 43.7	19.23	. .	1.2839	9.4531	9.6686	9.9155
1568	Gr. 3947	6.5	C	54 55	2 7	. .	44 42 16.2	19.25	. .	1.2844	9.4474	9.7037	9.8295
1569	8023	4.3*	A	56 10.34	2.744	+0.002	41 39 16.2	19.28	−0.012	1.2851	9.4392	9.7049	9.8055
1570	8024	4.5*	B	22 56 13.86	+2.517	+0.001	56 26 03.1	+19.28	+0.014	1.2851	9.4388	9.6710	9.9041
1571	XXII, 283	6.5	C	22 56 24	+3.0		15 33 36.0	+19.29	.	1.2852	9.4377	9.6915	9.4116
1572	XXII, 285	6.7*	C	56 38	2.9	.	22 27 32.4	19.29	−0.05	1.2852	9.4361	9.7035	9.5653
1573	8028	6*	B	56 51.19	2.742	+0.003	42 05 08.0	19.30	0.03	1.2855	9.4346	9.7027	9.8095
1574	Gr. 3964	7.0	B	57 14.51	2.465		59 10 50.0	19.30	−0.03	1.2857	9.4321	9.6576	9.9174
1575	Gr. 3965	6.7*	C	22 57 21	+2.6		54 33 49.2	+19.31		1.2857	9.4313	9.6735	9.8916
1576	8032	Var.	A	22 57 42.92	+2.885	+0.015	27 24 18.6	+19.32	+0.14	1.2859	9.4283	9.7065	9.6468
1577	8033	6.7	B	58 13.66	2.460	.	59 46 22.2	19.33	.	1.2862	9.4253	9.6518	9.9206
1578	8034	2*	AA	58 32.07	2.979	+0.006	14 31 59.0	19.34	−0.031	1.2864	9.4232	9.6871	9.3838
1579	8036	5*	A	58 34.44	2.658	+0.016	49 22 22.3	19.34	+0.146	1.2864	9.4230	9.6844	9.8644
1580	8037	7.7	C	22 58 37	+2.767		40 36 04.1	+19.34		1.2864	9.4228	9.7018	9.7974
1581	8039	5.6*	A	22 58 47.68	+2.259		66 32 08.1	+19.34	.	1.2865	9.4214	9.6179	9.9469
1582	XXII, 297	7.6	C	22 59 20	3.0	.	14 17 06.8	19.35	.	1.2868	9.4177	9.6858	9.3769
1583	8052	5*	A	23 1 01.56	2.914	+0.001	24 47 38.4	19.39	−0.021	1.2876	9.4057	9.6995	9.6080
1584	118 Heis. Peg.	6.5*	C	1 19	2.9	. . .	20 27 36.7	19.40	0.05	1.2878	9.4037	9.6947	9.5291
1585	8054	5*	B	23 1 20.26	+2.513	+0.005	58 44 39.9	+19.40	−0.022	1.2878	9.4034	9.6450	9.9175
1586	8056	6.5	B	23 1 35.14	+2.729	+0.006	45 23 31.6	+19.40	−0.05	1.2879	9.4016	9.6850	9.8382
1587	Gr. 3990	6.5	B	1 53.95	2.511	.	59 03 06.0	19.41	.	1.2880	9.3993	9.6417	9.9192
1588	8058	6*	B	1 56.54	2.728	.	45 42 44.6	19.41	+0.015	1.2881	9.3990	9.6834	9.8407
1589	8059	6.7*	B	2 04.82	2.692	+0.013	48 36 54.3	19.41	+0.12	1.2881	9.3980	9.6763	9.8612
1590	Gr. 3993	6.2	C	23 2 42	+2.4		62 57 26.7	+19.43		1.2883	9.3934	9.6208	9.9360
1591	8068	6.3	C	23 2 53.05	+2.408		63 32 47.7	+19.43		1.2885	9.3921	9.6171	9.9383
1592	R. C. 5973	6.9	C	3 04	2.8		38 14 19.6	19.44		1.2886	9.3907	9.6928	9.7781
1593	D.M.64°,1764	6.8	C	4 14	2.4	.	64 32 03.5	19.46		1.2892	9.3819	9.6110	9.9426
1594	8075	6.5*	B	4 23.78	2.544	+0.005	58 39 18.0	19.46	−0.01	1.2892	9.3807	9.6344	9.9186
1595	XXIII, 4	6*	C	23 4 30	+3.0		16 55 04.1	+19.47		1.2893	9.3799	9.6856	9.4510
1596	8076	6.7*	B	23 4 40.80	+2.774	−0.021	42 52 23.0	+19.47	−0.18	1.2894	9.3785	9.6818	9.8200
1597	8077	6.7	A	4 59.72	2.338	.	66 33 48.9	19.48	.	1.2895	9.3760	9.5918	9.9500
1598	8079	6*	A	5 45.18	2.917	−0.017	26 10 20.8	19.49	−0.114	1.2899	9.3701	9.6927	9.6322
1599	8082	5*	A	6 49.61	2.721	+0.008	48 43 24.9	19.52	+0.086	1.2904	9.3616	9.6618	9.8642
1600	8083	6*	A	23 7 16.18	+2.611	+0.249	56 28 42.0	+19.52	+0.268	1.2906	9.3581	9.6334	9.9094
1601	XXIII, 20	6.7	C	23 7 47	+3.0		18 57 15.2	+19.00		1.2908	9.3539	9.6846	9.5002
1602	Gr. 4017	6.5	C	8 32	2.7		49 56 16.4	19.55		1.2911	9.3477	9.6529	9.8728
1603	8091	7.0	B	8 51.80	2.918	.	27 23 26.4	19.56		1.2913	9.3449	9.6876	9.6519
1604	Gr. 4020	7.1	C	9 13	2.8	. . .	45 50 38.7	19.56	.	1.2914	9.3420	9.6627	9.8450
1605	8097	6.5	A	23 9 40.09	+2.919	+0.001	27 34 00.7	+19.57	+0.003	1.2916	9.3382	9.6862	9.6548
1606	130 Heis. Peg.	6*	C	23 9 48	+2.9		24 05 22.2	+19.57		1.2917	9.3370	9.6856	9.6003
1607	8099	8.2	C	9 57.68	2.920	. .	27 32 44.4	19.57		1.2917	9.3356	9.6856	9.6546
1608	8107	6*	A	11 00.64	2.701	+0.007	52 32 22.7	19.60	−0.27	1.2922	9.3266	9.6358	9.8897
1609	8110	6*	C	11 23.78	2.795		44 29 02.6	19.60	−0.07	1.2923	9.3231	9.6599	9.8357
1610	XXIII, 34	7.0	C	23 11 25	+3.0		17 37 25.6	+19.60		1.2923	9.3230	9.6787	9.4713
1611	8114	5.6*	B	23 11 57.11	+2.757	+0.003	48 19 57.2	+19.61	+0.003	1.2925	9.3183	9.6473	9.8637
1612	8115	6.5	C	12 04.14	2.795	. .	44 48 24.9	19.62	.	1.2926	9.3172	9.6572	9.8384
1613	8118	6*	B	12 27.70	2.831	−0.003	41 05 27.9	19.62	−0.018	1.2927	9.3137	9.6650	9.8083
1614	8120	6.8	C	13 09	2.804	. . .	44 27 13.9	19.63	.	1.2930	9.3075	9.6550	9.8362
1615	8124	5.6*	A	23 13 29.98	+2.423	+0.015	67 25 39.9	+19.64	+0.007	1.2932	9.3043	9.5473	9.9564
1616	8125	6*	A	23 13 40.56	+2.774	+0.001	47 56 23.8	+19.64	+0.037	1.2932	9.3026	9.6432	9.8617
1617	8126	6.5	A	13 49.64	2.777	0.019	47 41 46.2	19.65	0.04	1.2933	9.3013	9.6435	9.8601
1618	8128	6*	A	13 55.60	2.836	0.005	41 23 38.5	19.65	+0.016	1.2933	9.3003	9.6594	9.8115
1619	8131	5.4*	A	14 27.09	2.959	+0.002	23 03 22.9	19.66	−0.019	1.2935	9.2954	9.6781	9.5842
1620	XXIII, 57	6.7*	C	23 14 42	+3.0	.	16 34 03.9	+19.66	+0.07	1.2936	9.2931	9.6738	9.4465
1621	8133	6.5*	B	23 14 42.30	+2.921	+0.003	29 43 59.0	+19.66	−0.068	1.2936	9.2930	9.6759	9.6869
1622	8137	6.5	B	14 47.24	2.593		61 17 11.3	19.66	0.00	1.2937	9.2923	9.5802	9.9345
1623	8135	6.7*	B	14 49.34	2.823		43 26 00.1	19.66		1.2937	9.2919	9.6530	9.8288
1624	Gr. 4043	6.7	B	14 50.04	2.624	.	59 35 26.5	19.66	−0.03	1.2937	9.2918	9.5894	9.9272
1625	. 8136	6*	A	23 14 51.41	+2.870	+0.010	37 30 00.3	+19.67	−0.076	1.2937	9.2916	9.6659	9.7760

(1576) 8032. Maximum magnitude, 2.2*; minimum, 2.7*. (1579) 8036. A. R. relatively uncertain.
(1625) No. 1106 = B. A. C. 8136. Two Washington observations of 1873 give 1″.0.

Cat. No.	Number and Catalogue.	Mag.	Class.	Right ascension, 1875.0.	Annual precession.	Proper motion.	Declination, 1875.0.	Annual precession.	Proper motion.	Log. a'.	Log. b'.	Log. c'.	Log. d'.
				h. m. s.			° ′ ″						
1626	8138	6*	B	23 15 07.46	+2.591	−0.006	61 31 43.5	+19.67	−0.03	1.2933	9.2891	9.5773	9.9356
1627	8139	7.3	A	15 16.92	2.869	−0.003	37 53 54.0	19.67	0.00	1.2938	9.2875	9.6642	9.7799
1628	8141	6*	A	15 48.88	2.916	. .	31 07 40.2	19.68	−0.02	1.2940	9.2824	9.6725	9.7053
1629	8146	6*	B	16 27.10	2.978	+0.001	20 08 39.1	19.69	+0.01	1.2943	9.2761	9.6743	9.5292
1630	8147	7.2	A	23 16 32.51	+2.980	+0.026	19 52 27.0	+19.69	0.00	1.2943	9.2753	9.6741	9.5233
1631	8149	6.5*	A	23 16 46.29	+3.018	+0.003	11 37 44.2	+19.70	−0.023	1.2944	9.2730	9.6654	9.2967
1632	8153	6.0	B	16 58.37	2.647	0.001	59 26 54.3	19.70	−0.01	1.2945	9.2710	9.5812	9.9274
1633	8156	6.7	B	17 39.12	2.918	+0.024	31 50 38.6	19.71	0.00	1.2947	9.2642	9.6680	9.7148
1634	Gr. 4052	6.5	C	18 09	2.9	.	40 55 37.0	19.72		1.2949	9.2590	9.6501	9.8090
1635	8158	7.0	C	23 18 27.32	+2.702	+0.004	56 50 59.0	+19.72		1.2950	9.2559	9.5891	9.9157
1636	8159	6*	A	23 18 43.78	+2.923	. .	31 41 54.5	+19.73	+0.003	1.2951	9.2531	9.6658	9.7134
1637	8160	5.4*	A	19 08.52	2.972	+0.015	22 42 58.1	19.73	+0.03	1.2952	9.2488	9.6709	9.5798
1638	8162	6.5*	A	19 17.52	2.634	0.003	61 35 48.0	19.74	−0.012	1.2953	9.2472	9.5585	9.9374
1639	8173	6.8	A	21 00.93	2.450	0.003	69 59 49.3	19.76	0.00	1.2959	9.2286	9.4878	9.9667
1640	8171	6*	B	23 21 06.12	+2.866	+0.007	42 13 26.3	+19.77	+0.02	1.2959	9.2277	9.6386	9.8211
1641	8174	6*	A	23 21 27.78	+2.969	−0.001	24 28 51.2	+19.77	−0.038	1.2960	9.2236	9.6667	9.6112
1642	8180	6*	A	22 00.27	2.475	+0.029	69 40 19.6	19.78	−0.023	1.2962	9.2176	9.4856	9.9661
1643	8182	5*	A	22 50.02	3.025	+0.004	12 04 16.0	19.79	+0.021	1.2964	9.2081	9.6609	9.3147
1644	Gr. 4074	7.0	C	23 28	2.8		45 46 37.0	19.80	.	1.2966	9.2007	9.6195	9.8498
1645	8188	5*	B	23 24 15.92	+2.741		57 51 35.9	+19.81		1.2969	9.1911	9.5591	9.9225
1646	8195	6*	A	23 25 08.74	+2.910	+0.022	38 32 59.3	+19.82	0.05	1.2971	9.1804	9.6372	9.7896
1647	Gr. 4083	6.7*	C	25 48	2.9		43 22 56.3	19.83		1.2973	9.1722	9.6206	9.8320
1648	Gr. 4088	6.2	C	26 34	2.6	.	65 02 57.0	19.84	. .	1.2975	9.1625	9.4981	9.9528
1649	8203	6.5*	A	27 12.73	2.995	+0.004	21 48 32.7	19.85	−0.032	1.2977	9.1540	9.6588	9.5655
1650	8206	5.6*	A	23 27 45.22	+2.960	+0.002	30 38 07.6	+19.85	−0.021	1.2977	9.1469	9.6482	9.7028
1651	F. 4509	7.0	C	23 27 47	+2.7	. .	59 21 39.5	+19.85	. .	1.2979	9.1465	9.5336	9.9304
1652	8211	6*	A	28 27.79	2.953	+0.002	32 48 21.0	19.86	+0.035	1.2980	9.1372	9.6425	9.7297
1653	8212	6*	B	28 30.77	2.920	−0.002	39 32 51.1	19.86	−0.034	1.2980	9.1366	9.6251	9.7998
1654	151 Heis. Peg.	6.7*	C	28 45	3.0	.	23 44 08.5	19.87	.	1.2981	9.1333	9.6550	9.6007
1655	8222	6*	A	23 31 19.86	+3.023	+0.008	16 08 01.5	+19.90	−0.013	1.2988	9.0961	9.6546	9.4405
1656	8223	6.7*	B	23 31 25.67	+2.911	.	43 44 16.4	+19.90	.	1.2988	9.0946	9.6015	9.8363
1657	8224	4*	A	31 27.04	2.960	+0.016	45 46 51.3	19.90	−0.423	1.2988	9.0943	9.5929	9.8519
1658	8227	6.5*	A	31 38.19	3.018	+0.009	17 42 29.2	19.90	+0.009	1.2988	9.0915	9.6541	9.4798
1659	8229	4*	A	32 00.54	2.922		42 34 34.1	19.90	−0.006	1.2989	9.0858	9.6041	9.8270
1660	Gr. 4110	7.2	C	23 32 27	+2.8		57 57 46.0	+19.91		1.2990	9.0788	9.5209	9.9251
1661	8231	6.5*	B	23 33 05.07	+2.886	−0.002	49 46 47.0	+19.92	−0.006	1.2992	9.0688	9.5678	9.8798
1662	8237	4.5*	A	34 15.23	2.928	+0.004	43 38 31.5	19.93	−0.01	1.2994	9.0496	9.5926	9.8362
1663	Gr. 4125	6.7*	C	35 21	2.9		48 49 12.3	19.94		1.2996	9.0308	9.5641	9.8741
1664	8245	6.7*	B	36 05.68	2.934		44 17 58.2	19.94		1.2998	9.0175	9.5835	9.8417
1665	8247	7.3	A	23 36 11.96	+3.026		17 58 27.6	+19.95		1.2999	9.0156	9.6480	9.4870
1666	8248	6.7*	A	23 36 23.19	+3.033	+0.007	15 38 31.4	+19.95	+0.017	1.2999	9.0122	9.6489	9.4285
1667	8252	6.5	A	37 00.68	2.897	.	52 27 33.0	19.95	−0.02	1.3000	9.0005	9.5363	9.8970
1668	XXIII, 164	7.5	B	37 19.52	2.865	+0.049	57 22 12.1	19.95	+0.473	1.3000	8.9941	9.5011	9.9233
1669	8256	5*	A	37 42.40	3.000	+0.007	28 40 9.3	19.96	−0.038	1.3001	8.9873	9.6307	9.6792
1670	Gr. 4136	6.7*	C	23 38 43	+2.9		55 06 21.7	+19.97		1.3003	8.9672	9.5109	9.9120
1671	8261	6.5*	B	23 39 50.62	+2.951		45 43 34.8	+19.98	−0.015	1.3005	8.9437	9.5632	9.8532
1672	P. M. 2848	7.0	C	40 05	2.9		59 46 44.4	19.98		1.3006	8.9385	9.4675	9.9350
1673	P. M. 2850	7.0	C	40 35	3.0	.	27 43 34.8	19.98		1.3006	8.9275	9.6268	9.6661
1674	8268	5*	A	40 57.20	2.893	+0.006	57 57 20.8	19.98	+0.04	1.3007	8.9191	9.4780	9.9267
1675	Gr. 4139	6.7*	C	23 41 21	+3.0		46 08 18.1	+19.99		1.3007	8.9101	9.5554	9.8565
1676	8273	5.6*	A	23 41 56.65	+2.822	0.000	67 06 44.2	+19.99	−0.006	1.3008	8.8960	9.3825	9.9630
1677	Gr. 4142	7.8	C	42 03	2.8		63 07 23.3	19.99		1.3008	8.8934	9.4258	9.9490
1678	8277	6.7*	C	42 36.43	2.862	. .	64 10 57.0	. .	. .	1.3009	8.8800	9.4103	9.9531
1679	8279	6*	B	42 45.45	2.886	−0.002	61 31 11.3	19.99	−0.014	1.3009	8.8760	9.4362	9.9427
1680	8280	6.5	A	23 42 46.68	+2.902		59 17 00.8	+19.99	−0.03	1.3009	8.8750	9.4565	9.9331
1681	8282	6.8	B	23 43 03.98	+2.912	+0.011	58 16 07.2	+20.00	−0.04	1.3010	8.8683	9.4639	9.9285
1682	8284	6*	A	43 19.97	3.019	+0.007	28 08 48.3	20.00	+0.015	1.3010	8.8613	9.6200	9.6725
1683	8289	6.8	B	44 07.90	2.957		50 55 39.6	20.00		1.3011	8.8400	9.5148	9.8890
1684	Gr. 4149	6.9	B	44 18.83	2.891		63 02 55.3	20.00	−0.02	1.3011	8.8350	9.4109	9.9491
1685	Gr. 4152	6.6	C	23 44 53	+2.9		63 17 23.2	+20.01		1.3012	8.8190	9.4047	9.9500
1686	8296	6.5*	A	23 46 02.79	+3.040	−0.001	20 58 33.3	+20.02	−0.02	1.3014	8.7842	9.6303	9.5531
1687	8299	6.5*	AA	46 07.80	3.044	.	18 25 34.3	20.02	−0.021	1.3014	8.7816	9.6342	9.4990
1688	8300	6*	A	46 14.63	3.057	−0.001	10 15 07.3	20.02	+0.006	1.3014	8.7781	9.6411	9.2496
1689	8301	6.6	B	46 19.12	3.040	−0.003	21 02 53.3	20.02	−0.028	1.3014	8.7757	9.6298	9 5545
1690	XXIII, 216	7.3	C	23 46 36	+3.1		11 13 50.3	+20.02		1.3014	8.7667	9.6404	9.2888

Cat. No.	Number and Catalogue.	Mag.	Class.	Right ascension, 1875.0.	Annual precession.	Proper motion.	Declination, 1875.0.	Annual precession.	Proper motion.	Log. a'.	Log. b'.	Log. c'.	Log. d'.
				h. m. s.			° ′ ″						
1691	166 Heis. Peg.	6*	C	23 46 38	+3.0		17 12 20.2	+20.02	. .	1.3014	8.7667	9.6352	9.4703
1692	8307	7.0	B	47 18.00	2.980		50 49 37.8	20.02	+0.02	1.3015	8.7434	9.5011	9.8888
1693	Gr. 4159	6.7*	C	47 44	3.0	.	38 35 09.6	20.02	.	1.3015	8.7283	9.5712	9.7944
1694	8310	5.4*	A	48 08.80	2.965	−0.001	56 48 13.8	20.03	−0.009	1.3016	8.7135	9.4484	9.9220
1695	8316	6.5	C	23 49 14.52	+2.991		52 02 20.0	+20.03	.	1.3017	8.6713	9.4829	9.8963
1696	8317	7.5	B	23 49 18.36	+2.976	.	56 42 59.0	+20.03	−0.02	1.3017	8.6689	9.4427	9.9217
1697	XXIII, 235	6*	C	50 19	3.0		21 57 09.5	20.03		1.3018	8.6257	9.6214	9.5723
1698	Gr. 4172	6*	C	50 43	3.0		41 57 44.9	20.04	. .	1.3018	8.6070	9.5437	9.8248
1699	8322	6*	C	50 50.79	2.994		55 00 37.9	20.04	−0.018	1.3018	8.6013	9.4495	9.9131
1700	A. Ö. 26212	6.7	C	23 51 16	+3.0		59 19 40.6	+20.04		1.3019	8.5869	9.4050	9.9342
1701	XXIII, 238	6.7*	C	23 51 23	+3.1	. .	10 46 42.8	+20.04	−0.05	1.3019	8.5751	9.6368	9.2716
1702	8324	4.5*	A	51 23.51	3.048	−0.001	24 26 47.7	20.04	−0.033	1.3019	8.5746	9.6133	9.6165
1703	8326	6.7	C	51 47.79	3.015	. .	49 44 35.3	20.04	+0.23	1.3019	8.5537	9.4881	9.8823
1704	8330	5*	B	52 40.50	3.010	−0.001	55 03 32.7	20.04	−0.02	1.3019	8.5047	9.4389	9.9135
1705	Gr. 4190	7.2	C	23 52 54	+3.0		49 50 01.7	20.04		1.3020	8.4911	9.4822	9.8830
1706	8335	7.0	B	23 53 24.00	+3.064		10 34 38.2	+20.04	.	1.3020	8.4593	9.6353	9.2636
1707	8337	6.5	A	54 00.29	3.052		26 13 26.8	20.05	−0.037	1.3020	8.4176	9.6029	9.6452
1708	R. C. 6254	6.3	C	54 11	3.0	.	58 51 52.4	20.05		1.3021	8.4040	9.3910	9.9323
1709	8338	7.2	A	54 21.93	3.010	+0.007	61 28 53.0	20.05	−0.045	1.3021	8.3906	9.3594	9.9437
1710	R. C. 6258	7.5	C	23 54 44	+3.0		68 52 47.0	+20.05		1.3021	8.3613	9.2524	9.9692
1711	8344	6.7*	A	23 55 15.05	+3.022	+0.067	60 31 36.0	+20.05	−0.014	1.3021	8.3164	9.3646	9.9397
1712	8345	6*	C	55 20.55	3.047	.	41 40 16.5	20.05		1.3021	8.3079	9.5284	9.8226
1713	8350	6*	A	55 38.65	3.058	+0.065	26 25 13.7	20.05	−0.98	1.3021	8.2789	9.5988	9.6482
1714	8355	6.7*	A	56 12.62	3.022	−0.003	65 24 09.9	20.05	−0.052	1.3021	8.2184	9.2915	9.9586
1715	Gr. 4207	6.8	B	23 56 43.76	+3.054		42 03 07.6	+20.05		1.3021	8.1535	9.5208	9.8259
1716	Gr. 4216	7.0	C	23 57 45	+3.1	.	49 10 27.6	+20.05	.	1.3021	7.9906	9.4640	9.8789
1717	8359	6.5*	C	57 48.04	3.047	−0.002	61 35 29.7	20.05	−0.006	1.3021	7.9821	9.3322	9.9443
1718	8364	6.5	A	58 28.79	3.057		57 50 09.8	20.05	−0.05	1.3021	7.8215	9.3702	9.9276
1719	8366	5*	B	58 39.25	3.057	. .	60 37 04.6	20.05	.	1.3022	7.7688	9.3385	9.9402
1720	8370	6.5*	A	23 59 16.97	+3.070	+0.002	12 42 02.0	+20.05	+0.004	1.3022	7.4954	9.6273	9.3421
1721	8372	6.5	B	23 59 44.02	+3.068	+0.034	57 44 22.7	+20.05	+0.03	1.3022	7.0650	9.3665	9.9272
1722	8373	6.5*	B	23 59 57.54	3.070	0.002	63 30 01.1	20.05	−0.005	1.3022	6.2526	9.2873	9.9518
1723	8374	7.5	A	0 0 07.55	3.071	+0.024	28 19 54.3	20.05	−0.187	1.3022	6.7396*n*	9.5817	9.6763
1724	Gr. 4237	6.7	C	1 11	3.1	. .	39 27 10.7	20.05	. .	1.3022	7.7126	9.5207	9.8031
1725	4	2*	AA	0 1 55.71	+3.077	+0.011	28 24 01.1	+20.05	−0.157	1.3022	7.9250*n*	9.5771	9.6772
1726	7	2*	A	0 2 31.07	+3.095	+0.070	58 27 36.4	+20.05	−0.204	1.3022	8.0408*n*	9.3377	9.9305
1727	8	6.5*	B	2 35.66	3.075	+0.012	17 31 01.4	20.05	−0.018	1.3022	8.0538*n*	9.6132	9.4785
1728	Gr. 4243	7.0	C	2 59	3.1		45 41 33.7	20.05		1.3021	8.1134*n*	9.4681	9.8547
1729	13	7.7	C	3 33.77	3.092	. .	45 41 43.6	20.05	. .	1.3021	8.1916*n*	9.4653	9.8546
1730	14	6*	B	0 3 36.78	+3.075	+0.008	10 27 00.8	+20.05	+0.002	1.2021	8.1976*n*	9.6272	9.2585
1731	Gr. 2	7.1	C	0 3 46	+3.1	. .	51 33 35.2	+20.05	. .	1.3021	8.2151*n*	9.4048	9.8938
1732	16	5.6*	A	3 49.79	3.094	+0.003	45 22 35.4	20.05	+0.001	1.3021	8.2230*n*	9.4697	9.8523
1733	18	7.3	B	4 01.52	3.110		58 58 39.3	20.05	−0.052	1.3021	8.2442*n*	9.3193	9.9329
1734	Gr. 7	7.0	C	5 12	3.1		65 25 50.2	20.05	.	1.3021	8.3558*n*	9.2035	9.9587
1735	Gr. 9	6*	C	0 5 27	+3.1		47 27 22.1	+20.05	. .	1.3020	8.3760*n*	9.4408	9.8672
1736	Gr. 13	6.5	C	0 6 02	+3.1	.	44 00 45.1	+20.04	. .	1.3020	8.4203*n*	9.4680	9.8417
1737	26	3.2*	AA	6 48.01	3.081	+0.001	14 29 18.7	20.04	−0.013	1.3020	8.4723*n*	9.6156	9.3981
1738	28	6*	A	7 01.62	3.106	−0.010	40 20 42.8	20.04	−0.127	1.3020	8.4864*n*	9.4926	9.8110
1739	Gr. 24	6.9	C	8 02	3.1	. .	40 20 10.9	20.04	.	1.3019	8.5443*n*	9.4886	9.8108
1740	32	5*	AA	0 8 08.26	+3.088	+0.007	19 30 41.4	+20.04	+0.009	1.3019	8.5502*n*	9.5989	9.5235
1741	46	6*	B	0 10 15.07	+3.178	. .	60 50 19.1	+20.03	. .	1.3017	8.6504*n*	9.2364	9.9407
1742	48	7.5	A	10 18.79	3.085		13 13 19.0	20.03	−0.03	1.3017	8.6531*n*	9.6150	9.3589
1743	51	6.0	C	10 33.64	3.138	. .	47 15 07.3	20.03	−0.08	1.3017	8.6634*n*	9.4161	9.8654
1744	52	5.6	A	10 33.84	3.119	−0.005	37 59 15.3	20.03	0.017	1.3017	8.6635*n*	9.4964	9.7888
1745	54	6.7*	C	0 11 05.92	+3.135		50 44 19.1	+20.03		1.3016	8.6850*n*	9.3749	9.8884
1746	55	7.4	A	0 11 20.86	3.090	+0.017	15 38 13.9	+20.03	−0.03	1.3016	8.6946*n*	9.6069	9.4301
1747	58	4.5*	A	11 48.04	3.121	−0.006	36 05 31.5	20.03	−0.05	1.3016	8.7115*n*	9.5056	9.7696
1748	60	6.7	A	12 07.10	3.137	+0.001	43 05 48.5	20.02	+0.006	1.3015	8.7230*n*	9.4483	9.8346
1749	63	7.0	A	13 28.76	3.093	. .	15 33 25.2	20.02	0.00	1.3014	8.7692*n*	9.6045	9.4277
1750	65	7.3	A	0 13 56.15	+3.219	.	61 11 08.0	+20.02	.	1.3014	8.7837*n*	9.1928	9.9418
1751	R. C. 71	7.0	C	0 14 27	+3.2	.	66 18 40.8	+20.01	.	1.3013	8.7994*n*	9.0668	9.9609
1752	67	6.5*	A	14 32.44	3.135	. .	37 16 33.9	20.01	−0.035	1.3013	8.8021*n*	9.4869	9.7814
1753	Gr. 52	8.0	C	14 34	3.2	. . .	44 14 37.0	20.01	.	1.3013	8.8029*n*	9.4259	9.8428
1754	68	6.5	A	14 46.85	3.275	−0.006	67 07 45.3	20.01	−0.05	1.3013	8.8092*n*	9.0385	9.9635
1755	73	6.2	A	0 15 57.49	+3.092	.	12 47 17.7	+20.01	+0.03	1.3011	8.8425*n*	9.6104	9.3440

(1736) Gr. 13. The declination is quite uncertain owing to possible proper motion southward.

Cat. No.	Number and Catalogue.	Mag.	Class.	Right ascension, 1875.0.	Annual precession.	Proper motion.	Declination, 1875.0.	Annual precession.	Proper motion.	Log. a'.	Log. b'.	Log. c'.	Log. d'.
				h. m. s.			° ′ ″						
1756	Gr. 55	7.1	C	0 16 04	+3.2		53 57 07.5	+20.00	.	1.3011	8.8454n	9.2982	9.9066
1757	78	6.7*	B	17 26.63	3.168		43 34 17.2	19.99	−0.04	1.3009	8.8811n	9.4182	9.8371
1758	79	6*	B	17 31.98	3.199	. .	51 19 37.8	19.99	.	1.3009	8.8833n	9.3252	9.8912
1759	80	6.5*	A	17 54.50	3.260	+0.001	61 08 17.2	19.99	−0.012	1.3008	8.8924n	9.1494	9.9411
1760	82	7.0	A	0 18 09.94	+3.096		13 37 21.2	+19.99	−0.007	1.3008	8.8986n	9.6054	9.3707
1761	83	6*	B	0 18 21.11	+3.209		52 21 14.6	+19.99	−0.016	1.3008	8.9030n	9.3047	9.8972
1762	R. C. 93	7.0	C	19 24	3.2	. .	56 05 18.3	19.98	.	1.3006	8.9270n	9.2354	9.9175
1763	91	6.5	A	19 33.66	3.112	+0.001	19 27 14.6	19.98	0.00	1.3006	8.9307n	9.5806	9.5209
1764	92	6.5	A	19 49.67	3.241		55 56 56.1	19.98	+0.02	1.3005	8.9365n	9.2341	9.9165
1765	Gr. 64	7.1	B	0 20 27.82	3.210		49 17 37.2	+19.97	.	1.3004	8.9502n	9.3332	9.8780
1766	98	6.7	A	0 21 01.11	+3.105	+0.007	15 19 58.5	+19.97	0.00	1.3003	8.9618n	9.5957	9.4205
1767	99	6.8	A	21 28.15	3.114	+0.013	18 49 21.4	19.97	−0.02	1.3003	8.9710n	9.5804	9.5068
1768	100	6.5*	B	21 30.84	3.191	. .	43 42 10.0	19.96	. .	1.3002	8.9713n	9.3962	9.8375
1769	101	6.5*	A	21 32.05	3.110	+0.009	17 12 01.3	19.96	+0.025	1.3002	8.9723n	9.5874	9.4690
1770	102	6*	A	0 21 43.06	+3.107	−0.003	15 45 14.3	+19.96	+0.003	1.3002	8.9760n	9.5932	9.4318
1771	L. L. 655	6*	C	0 23 20	+3.3		59 17 11.0	+19.95	. .	1.2999	9.0070n	9.1278	9.9321
1772	109	6.5*	A	23 31.70	3.147	.	29 03 43.5	19.95	−0.064	1.2999	9.0106n	9.5178	9.6841
1773	114	6.5	A	24 14.95	3.385	+0.009	65 49 43.6	19.94	−0.02	1.2997	9.0237n	8.9102	9.9577
1774	116	7.0	A	24 17.61	3.110	−0.005	15 20 48.5	19.94	+0.014	1.2997	9.0245n	9.5915	9.4202
1775	Gr. 74	6.7	C	0 24 29	+3.2		43 15 22.0	+19.94		1.2997	9.0280n	9.3855	9.8334
1776	120	6*	A	0 24 47.47	+3.164	. .	32 53 29.4	+19.93	. .	1.2996	9.0333n	9.4853	9.7323
1777	121	5*	A	24 53.07	3.269	+0.004	53 49 54.8	19.93	−0.023	1.2996	9.0349n	9.2268	9.9045
1778	122	7.0	A	25 06.18	3.111	−0.001	15 19 54.3	19.93	−0.03	1.2996	9.0387n	9.5905	9.4197
1779	123	7.4	C	25 19.31	3.268		53 07 29.1	19.93		1.2995	9.0424n	9.2360	9.9004
1780	Gr. 86	7.3	C	0 25 53	+3.3		53 25 52.4	+19.92		1.2994	9.0519n	9.2253	9.9020
1781	126	4.5*	A	0 25 54.52	+3.358	.	62 14 29.4	+19.92	−0.015	1.2994	9.0523n	9.0065	9.9441
1782	130	6.5*	A	26 02.43	3.125	+0.011	19 36 20.5	19.92	0.043	1.2994	9.0545n	9.5690	9.5229
1783	O. 103	7.0	B	26 13.66	3.151		27 35 22.1	19.92	−0.02	1.2993	9.0575n	9.5207	9.6629
1784	133	7.5	B	27 07.30	3.128		19 44 38.6	19.91	+0.038	1.2991	9.0721n	9.5664	9.5257
1785	131	6.7*	A	0 27 08.99	+3.427		66 03 38.7	+19.91	−0.007	1.2991	9.0726n	8.8328	9.9579
1786	139	8.3	C	0 28 15.53	+3.4		61 10 31.8	+19.91	..	1.2989	9.0900n	9.0061	9.9392
1787	142	6.0	B	28 26.66	3.108		12 41 02.2	19.90	.	1.2988	9.0927n	9.5978	9.3382
1788	Gr. 96	7.1	B	28 32.06	3.294	.	53 30 49.7	19.90	−0.03	1.2988	9.0940n	9.1992	9.9019
1789	146	6*	A	29 11.40	3.300	+0.002	53 28 45.7	19.89	−0.007	1.2986	9.1039n	9.1935	9.9015
1790	148	6*	A	0 29 21.77	+3.362		59 38 15.0	+19.89	0.00	1.2986	9.1065n	9.0377	9.9324
1791	149	6.5	B	0 29 26.30	+3.109	−0.010	12 31 27.1	+19.89	−0.20	1.2986	9.1075n	9.5975	9.3326
1792	O, 122	6.7*	C	29 44	3.2		26 33 57.3	19.88	−0.08	1.2985	9.1118n	9.5188	9.6469
1793	152	6*	B	29 59.27	3.238	.	43 47 54.8	19.88	.	1.2984	9.1155n	9.3480	9.8364
1794	153	4*	A	30 00.84	3.305	+0.005	53 12 31.0	19.88	−0.02	1.2984	9.1160n	9.1911	9.8998
1795	155	4*	A	0 30 12.41	+3.185		33 01 51.4	+19.88	+0.003	1.2984	9.1187n	9.4656	9.7327
1796	156	6*	B	0 30 16.63	+3.117	+0.001	14 32 37.3	+19.88	−0.01	1.2984	9.1197n	9.5876	9.3961
1797	158	6*	A	30 39.84	3.195		34 42 41.7	19.87	+0.04	1.2983	9.1252n	9.4482	9.7586
1798	Gr. 108	7.0	B	31 25.34	3.381		59 38 13.0	19.86		1.2981	9.1357n	9.0062	9.9318
1799	L. L. 960	6.5	C	31 39	3.3	.	59 08 18.6	19.86	. .	1.2980	9.1388n	9.0187	9.9295
1800	164	4.5*	AA	0 31 57.20	+3.173	−0.015	28 37 58.1	+19.86	−0.250	1.2979	9.1429n	9.4973	9.6763
1801	165	6*	B	0 32 15.77	+3.284	.	48 40 01.4	+19.85	. . .	1.2978	9.1471n	9.2587	9.8712
1802	166	3.4*	A	32 38.80	3.181	+0.011	30 10 36.1	19.85	−0.086	1.2977	9.1522n	9.4825	9.6969
1803	168	6.2	A	32 51.65	3.143	−0.035	20 34 32.6	19.85	−0.373	1.2977	9.1550n	9.5515	9.5414
1804	170	6.5*	A	33 20.86	3.144	+0.002	20 45 08.4	19.84	0.027	1.2976	9.1613n	9.5494	9.5448
1805	169	2.2* to 2.8*	AA	0 33 25.46	+3.358	+0.007	55 51 05.2	+19.84	−0.045	1.2975	9.1623n	9.0910	9.9132
1806	173	5.6*	A	0 34 20.92	+3.231		38 46 20.0	+19.83	0.00	1.2973	9.1741n	9.3888	9.7918
1807	175	6.0	A	34 37.62	3.512	.	65 27 41.6	19.82	−0.02	1.2972	9.1776n	8.6362	9.9539
1808	178	6.7*	A	34 58.26	3.161	.	23 56 36.3	19.82	.	1.2971	9.1818n	9.5249	9.6033
1809	180	5.4*	A	35 05.92	3.312	−0.001	49 49 35.8	19.82	−0.013	1.2970	9.1834n	9.2131	9.8780
1810	181	7.0	B	0 35 13.49	+3.243	−0.004	40 00 17.2	+19.82	+0.017	1.2970	9.1850n	9.3691	9.8030
1811	182	6.7*	B	0 35 20.29	+3.400	.	58 04 04.5	+19.81	−0.01	1.2970	9.1863n	8.9962	9.9236
1812	Gr. 125	7.0	C	35 38	3.3		51 39 04.9	19.81		1.2969	9.1898n	9.1698	9.8892
1813	189	5*	A	36 33.45	3.293	.	46 20 25.8	19.80	−0.03	1.2966	9.2010n	9.2664	9.8539
1814	197	6*	A	37 30.12	3.306	. .	47 10 43.2	19.78	+0.038	1.2963	9.2119n	9.2442	9.8595
1815	198	5*	A	0 37 45.96	3.311	+0.002	47 35 59.5	+19.78	−0.003	1.2962	9.2149n	9.2342	9.8624
1816	201	6*	B	0 38 10.44	+3.382		54 32 11.9	+19.77	−0.04	1.2961	9.2196n	9.0668	9.9048
1817	L. L. 1210	6.7	C	39 23	3.4	.	58 53 26.8	19.76	. .	1.2957	9.2330n	8.8906	9.9261
1818	211	6.5*	A	40 00.56	3.132	−0.002	14 47 35.8	19.75	−0.061	1.2955	9.2398n	9.5742	9.4005
1819	213	5*	B	40 30.24	3.118	+0.002	11 17 30.3	19.74	−0.017	1.2953	9.2451n	9.5922	9.2850
1820	214	6*	A	0 40 37.39	+3.152	+0.006	18 53 42.6	+19.74	+0.011	1.2953	9.2463n	9.5483	9.5035

1787 = B. A. C. 142 and 1808 = B. A. C. 178. A. R. uncertain.

Cat. No.	Number and Catalogue.	Mag.	Class.	Right ascension, 1875.0.	Annual precession.	Proper motion.	Declination, 1875.0.	Annual precession.	Proper motion.	Log. a'.	Log. b'.	Log. c'.	Log. d'.
				h. m. s.			° ′ ″						
1821	215	4.5*	A	0 40 42.93	+3.174	—0.005	23 35 12.7	+19.74	—0.08	1.2953	9.2473*n*	9.5144	9.5953
1822	Gr. 142	7.5	B	40 55.04	3.362	.	50 45 44.0	19.73	. .	1.2952	9.2494*n*	9.1364	9.8821
1823	217	6.7*	A	41 17.12	3.160	+0.010	20 14 31.4	19.73	+0.016	1.2951	9.2533*n*	9.5379	9.5320
1824	218	4*	A	41 32.83	3.444	0.138	57 09 07.7	19.72	—0.483	1.2950	9.2560*n*	8.9236	9.9172
1825	219	5*	A	0 41 45.36	+3.362	+0.002	50 17 08.9	+19.72	—0.03	1.2949	9.2581*n*	9.1394	9.8788
1826	223	6.5*	B	0 42 24.60	+3.143	—0.003	16 15 55.2	+19.71	—0.198	1.2947	9.2648*n*	9.5623	9.4398
1827	224	7.5	B	42 27.56	3.202	. . .	28 02 15.8	19.71		1.2947	9.2653*n*	9.4719	9.6646
1828	226	6.5	C	42 37.47	3.283	—0.001	47 04 58.6	19.70	.	1.2946	9.2670*n*	9.2042	9.8572
1829	227	4.5*	A	42 55.45	3.337	. .	40 23 52.3	19.70	—0.007	1.2945	9.2700*n*	9.3218	9.8040
1830	228	6*	A	0 43 09.42	+3.574	—0.002	63 33 58.8	+19.70	—0.027	1.2944	9.2723*n*	8.4070	9.9443
1831	229	6.5*	A	0 43 10.51	+3.199	+0.003	27 01 45.2	+19.70	—0.008	1.2944	9.2725*n*	9.4791	9.6497
1832	232	6.7	B	43 48.90	3.383	+0.018	50 49 37.0	19.69	. .	1.2942	9.2787*n*	9.1030	9.8815
1833	235	6.7	B	44 26.44	3.388	. .	50 53 27.2	19.68	—0.002	1.2939	9.2849*n*	9.0940	9.8816
1834	239	5.6*	A	45 37.31	3.537	—0.015	60 26 17.5	19.66	+0.16	1.2935	9.2961*n*	8.6238	9.9308
1835	244	6.5*	C	0 47 35.57	+3.517	—0.006	58 17 42.7	+19.62	—0.10	1.2927	9.3146*n*	8.7202	9.9204
1836	247	6*	A	0 47 58.25	+3.164	—0.002	18 30 36.5	+19.62	—0.012	1.2926	9.3176*n*	9.5384	9.4921
1837	245	6.5	A	47 59.52	3.380	. .	48 00 01.0	19.62	0.04	1.2926	9.3178*n*	9.1328	9.8615
1838	250	6.0	A	48 16.60	3.189	+0.008	22 57 03.0	19.61	0.039	1.2925	9.3203*n*	9.5025	9.5813
1839	253	2*	A	49 10.66	3.565	+0.006	60 02 21.3	19.59	0.025	1.2921	9.3282*n*	8.5079	9.9276
1840	254	6.5*	B	0 49 14.30	+3.536		58 30 18.7	+19.59	—0.06	1.2921	9.3288*n*	8.6521	9.9217
1841	256	6*	A	0 49 15.35	+3.213	+0.002	26 31 52.4	+19.59	+0.015	1.2921	9.3289*n*	9.4668	9.6399
1842	255	6.3	B	49 15.83	3.559		59 41 08.4	19.59		1.2920	9.3290*n*	8.5421	9.9260
1843	258	6.5	C	49 35.74	3.139	. .	13 16 28.8	19.58	.	1.2919	9.3319*n*	9.5717	9.3508
1844	259	4*	AA	49 49.10	3.295	+0.006	37 49 15.4	19.58	+0.042	1.2918	9.3338*n*	9.3233	9.7773
1845	263	7.8	B	0 50 31.23	+3.216		26 19 21.6	+19.57		1.2915	9.3398*n*	9.4653	9.6362
1846	264	4.5*	A	0 50 32.09	+3.194		22 44 32.1	+19.57	—0.049	1.2915	9.3399*n*	9.4992	9.5766
1847	261	6*	A	50 37.55	3.719	.	65 40 33.1	19.57	0.00	1.2915	9.3407*n*	8.3210*n*	9.9490
1848	267	6*	A	51 04.41	3.230	—0.003	28 18 56.9	19.56	—0.034	1.2913	9.3444*n*	9.4427	9.6652
1849	269	6*	A	51 21.10	3.140		13 01 11.8	19.55		1.2912	9.3467*n*	9.5714	9.3417
1850	O, 245	6.5	C	0 51 40	+3.2	.	20 43 42.3	+19.54	0.00	1.2910	9.3493*n*	9.5141	9.5378
1851	O, 253	6.7*	B	0 53 48.03	+3.188		20 34 30.8	+19.50	+0.03	1.2901	9.3666*n*	9.5112	9.5338
1852	O, 255	8.2	C	54 42	3.1	.	10 30 27.6	19.48		1.2897	9.3737*n*	9.5838	9.2484
1853	O, 258	6.5	B	54 58.46	3.216	.	24 37 08.7	19.48	—0.03	1.2896	9.3757*n*	9.4706	9.6071
1854	283	6.7*	B	55 53.02	3.348	—0.005	40 40 22.2	19.46	0.00	1.2891	9.3828*n*	9.2348	9.8010
1855	282	6.7*	B	0 55 55.31	+3.640		60 24 09.1	+19.45		1.2891	9.3832*n*	7.6224	9.9259
1856	285	5.6*	A	0 55 58.49	+3.266	—0.001	31 07 57.2	+19.46	—0.03	1.2891	9.3835*n*	9.3918	9.7004
1857	290	7.0	A	56 54.55	3.515	—0.014	53 32 04.2	19.44	—0.08	1.2886	9.3905*n*	8.7790	9.8918
1858	297	6.5	C	57 34.57	3.343	.	39 19 14.9	19.42	.	1.2883	9.3955*n*	9.2508	9.7850
1859	299	6.7*	B	57 38.09	3.255	+0.014	28 59 28.6	19.42	—0.12	1.2883	9.3959*n*	9.4131	9.6716
1860	298	6.9	B	0 57 50.40	+3.796	+0.001	65 18 03.4	+19.42	+0.003	1.2882	9.3974*n*	8.8351*n*	9.9444
1861	305	6*	A	0 58 29.50	+3.157	—0.001	14 16 23.3	+19.41	+0.04	1.2879	9.4022*n*	9.5543	9.3776
1862	302	6.7*	C	58 30.37	3.708	. .	62 05 32.6	19.40	.	1.2879	9.4023*n*	8.3021	9.9320
1863	307	5.0	A	58 58.99	3.200	+0.003	20 48 12.1	19.39	—0.02	1.2876	9.4057*n*	9.4621	9.5389
1864	308	6.0	B	58 59.73	3.200	0.003	20 47 43.7	19.39	0.02	1.2876	9.4058*n*	9.4622	9.5357
1865	310	7.2	A	0 59 18.94	+3.281	+0.003	31 30 43.8	+19.38	—0.015	1.2874	9.4081*n*	9.3732	9.7035
1866	Gr. 241	6.7	C	0 59 56	+3.5	.	48 53 11.0	+19.37	.	1.2871	9.4126*n*	8.9569	9.8620
1867	314	5.6*	A	59 57.95	3.552	+0.388	54 18 21.3	19.37	—1.58	1.2871	9.4128*n*	8.6339	9.8946
1868	316	6*	A	59 59.14	3.146	0.001	12 17 07.2	19.37	+0.03	1.2871	9.4129*n*	9.5670	9.3129
1869	318	5*	B	1 0 50.60	3.401	0.013	43 16 31.6	19.35	—0.06	1.2867	9.4189*n*	9.1337	9.8205
1870	321	6*	B	1 1 06.51	+3.384	+0.016	31 20 39.5	+19.34	—0.045	1.2865	9.4207*n*	9.3682	9.7007
1871	322	6.5*	B	1 1 14.98	+3.200	+0.005	20 04 25.5	+19.34	—0.097	1.2865	9.4217*n*	9.5010	9.5199
1872	327	6*	A	2 13.41	3.956	+0.004	68 06 45.6	19.32	0.028	1.2860	9.4284*n*	9.0271*n*	9.9513
1873	330	4.5*	B	2 15.04	3.450	—0.005	46 34 28.3	19.32	0.012	1.2859	9.4286*n*	9.0145	9.8449
1874	Arg. 13	. .	B	2 25.88	3.923	+0.041	67 06 43.5	19.31	0.015	1.2858	9.4298*n*	9.0013*n*	9.9481
1875	334	2.3*	AA	1 2 44.29	+3.324	+0.018	34 57 26.5	+19.31	—0.092	1.2857	9.4319*n*	9.3026	9.7416
1876	336	6.5*	B	1 3 8.37	+3.195	+0.001	18 59 27.8	+19.30	+0.02	1.2855	9.4346*n*	9.5075	9.4957
1877	337	6*	B	3 13.19	3.392	—0.013	41 24 57.7	19.29	—0.055	1.2854	9.4352*n*	9.1621	9.8038
1878	335	6*	B	3 21.71	3.802	+0.007	63 32 14.4	19.29	0.00	1.2853	9.4361*n*	8.9010*n*	9.9351
1879	339	4.5*	B	3 30.08	3.583	+0.025	54 29 03.4	19.29	—0.026	1.2853	9.4370*n*	8.4675	9.8938
1880	341	6.7*	B	3 33.86	3.169	.	15 00 29.5	19.29	. .	1.2852	9.4374*n*	9.5418	9 3963
1881	338	6*	B	1 3 33.94	+3.832	—0.002	64 21 12.3	+19.29	—0.021	1.2852	9.4375*n*	8.9346*n*	9 9380
1882	343	6*	B	1 4 09.15	+3.350	—0.001	37 03 30.1	+19.27	—0.02	1.2849	9.4413*n*	9.2547	9.7628
1883	345	5.6*	B	4 13.43	3.291	+0.001	30 45 33.2	19.27	—0.01	1.2849	9.4418*n*	9.3644	9.6915
1884	O, 312	7.4	C	4 33	3.8	. .	64 20 42.3	19.26	.	1.2847	9.4440*n*	8.7972*n*	9.9375
1885	348	5.4*	B	4 44.21	3.209	0.002	20 22 10.4	19.26	+0.002	1.2846	9.4452*n*	9.4911	9.5241
1886	349	4*	A	4 46.74	3.281	+0.004	29 25 32.7	19.26	. .	1.2846	9.4454*n*	9.3819	9.6738
1887	I, 7	7.5	B	1 4 55.99	+3.222		22 03 27.0	+19.25	—0.03	1.2845	9.4465*n*	9.4730	9.5570

(1831) 229. Middle point of the double star.

Cat. No.	Number and Catalogue.	Mag.	Class.	Right ascension, 1875.0.	Annual precession.	Proper motion.	Declination, 1875.0.	Annual precession.	Proper motion.	Log. a'.	Log. b'.	Log. c'.	Log. d'.
				h. m. s.			° ′ ″						
1888	352	6.7*	B	1 5 30.10	+3.443		44 40 18.4	+19.24		1.2843	9.4491n	9.0447	9.8291
1889	357	7.3	A	5 57.70	3.303		31 24 41.8	19.23	. .	1.2839	9.4530n	9.3471	9.6988
1890	358	6.5	A	6 06.58	3.285	.	29 24 04.0	19.23	—0.036	1.2838	9.4540n	9.3773	9.6727
1891	365	5.4*	A	6 57.77	3.242	—0.001	23 55 17.2	19.20	0.012	1.2834	9.4595n	9.4469	9.5892
1892	370	6*	A	1 7 29.19	+3.178	—0.003	15 23 16.4	+19.19	—0.016	1.2831	9.4627n	9.5325	9.4070
1893	377	7.0	C	1 9 18.65	+3.433	.	42 16 47.6	+19.14		1.2820	9.4740n	9.0015	9.8077
1894	379	6.8	B	9 46.80	4.022		67 09 24.6	19.13	.	1.2817	9.4768n	9.1184n	9.9411
1895	Pi. I, 30	7.0	C	10 05	3.2		20 23 38.4	19.12	—0.05	1.2815	9.4796n	9.4797	9.5215
1896	382	8.2	C	10 13.44	3.859	.	62 53 05.4	19.11		1.2815	9.4794n	8.8494n	9.9287
1897	Lal. 2330	6.7	C	1 11 42	+3.4		36 43 40.0	+19.08		1.2806	9.4882n	9.2140	9.7551
1898	390	7.9	C	1 12 00.97	+3.721	.	57 32 59.5	+19.07	—0.03	1.2804	9.4901n	8.4474n	9.9045
1899	391	5.6*	B	12 14.00	3.724	+0.003	57 34 25.6	19.06	+0.01	1.2802	9.4913n	8.4622n	9.9044
1900	395	4.5*	A	12 35.97	3.280	0.002	26 36 22.8	19.05	—0.004	1.2800	9.4935n	9.3953	9.6290
1901	394	6.7*	B	12 45.47	3.893	+0.008	64 00 06.4	19.05	—0.04	1.2799	9.4944n	9.0863n	9.9314
1902	Gr. 294	6.5	C	1 13 02	+3.5		42 51 08.6	+19.04		1.2797	9.4960n	9.0212	9.8101
1903	401	5*	A	1 14 12.86	+3.297	+0.003	28 05 03.4	+19.01	—0.094	1.2790	9.5027n	9.3674	9.6496
1904	Gr. 297	6.5	C	14 22	3.6		49 27 58.0	19.01	.	1.2789	9.5035n	8.5988	9.8576
1905	Gr. 299	6.5	C	14 56	3.5	.	42 55 44.5	18.99	.	1.2785	9.5067n	8.9954	9.8096
1906	404	5*	A	14 59.18	3.498	+0.001	44 52 23.0	18.99	—0.003	1.2785	9.5070n	8.9070	9.8249
1907	409	6*	A	1 16 31.91	+3.402	+0.068	37 03 42.2	+18.95	—0.012	1.2775	9.5156n	9.1724	9.7564
1908	412	5*	A	1 17 07.57	+4.136	+0.011	67 28 35.6	+18.93	+0.012	1.2771	9.5188n	9.2148n	9.9405
1909	413	6.7*	A	17 07.94	3.207	0.004	17 09 58.5	18.93	—0.034	1.2771	9.5188n	9.5012	9.4450
1910	416	3.2*	A	17 39.22	3.828	0.040	59 35 05.0	18.91	0.05	1.2767	9.5216n	8.8260n	9.9103
1911	425	6*	B	18 57.89	3.489	+0.007	42 48 31.2	18.87	—0.06	1.2758	9.5286n	8.9483	9.8059
1912	427	5*	A	1 19 31.05	+3.223	—0.005	18 31 16.2	+18.86	+0.03	1.2755	9.5315n	9.4810	9.4753
1913	430	6.7	B	1 19 37.68	+3.232	+0.002	19 25 16.8	+18.86	—0.025	1.2754	9.5321n	9.4712	9.4951
1914	431	6.7*	A	19 56.69	3.225	0.002	18 35 31.4	18.85	0.042	1.2752	9.5338n	9.4804	9.4766
1915	432	5*	B	20 11.04	3.525	+0.033	44 45 37.4	18.84	—0.102	1.2750	9.5350n	8.8244	9.8205
1916	Gr. 317	6.5	C	20 51	3.5		43 24 00.7	18.82		1.2746	9.5384n	8.8914	9.8094
1917	439	6.7*	B	1 21 40.93	+3.209		16 25 54.4	+18.79		1.2740	9.5427n	9.5017	9.4231
1918	438	6.7*	A	1 21 57.44	+4.330	+0.025	69 37 12.8	+18.70	—0.086	1.2738	9.5441n	9.2480n	9.9444
1919	I, 90	6.5	C	22 30	3.3	.	24 37 38.9	18.77	.	1.2734	9.5469n	9.3938	9.5911
1920	441	6*	B	22 36.70	3.565	—0.001	46 21 41.7	18.76	—0.045	1.2733	9.5474n	8.6451	9.8307
1921	446	6*	A	23 08.11	+3.223	+0.003	17 42 31.2	+18.75	0.00	1.2729	9.5500n	9.4849	9.4539
1922	443	7.0	B	1 23 19.31	4.333	+0.004	69 22 27.4	18.74	—0.04	1.2728	9.5510n	9.2552n	9.9419
1923	444	7.4	B	1 23 22.55	+4.235	+0.020	67 45 54.9	+18.74	—0.10	1.2728	9.5512n	9.2180n	9.9370
1924	450	7.2	C	24 14.27	4.012	.	62 56 56.7	18.77	.	1.2721	9.5555n	9.0888n	9.9197
1925	453	4.3*	AA	24 47.74	3.198	+0.001	14 42 02.8	18.70	0.00	1.2717	9.5582n	9.5158	9.3740
1926	454	6.7*	C	25 06.27	3.159		10 14 37.9	18.69	. . .	1.2715	9.5597n	9.5592	9.2194
1927	455	7.0	A	1 25 19.08	+3.213	+0.007	16 18 32.8	+18.68	—0.275	1.2713	9.5608n	9.4973	9.4176
1928	F. 242	6.8	B	1 25 34.15	+4.297	—0.077	68 18 03.9	+18.67	+0.100	1.2712	9.5620n	9.2515n	9.9371
1929	456	5.6*	C	25 46.64	3.872	—0.004	58 35 22.3	18.66		1.2710	9.5630n	8.9339n	9.9000
1930	459	8.2	B	25 55.63	3.168		11 14 20.0	18.66		1.2709	9.5637n	9.5492	9.2585
1931	465	6*	A	27 03.87	3.439	. .	36 35 44.2	18.62	.	1.2700	9.5692n	9.1048	9.7432
1932	469	6.7*	A	1 28 03.55	+3.232	+0.010	17 49 16.9	+18.59	—0.099	1.2693	9.5739n	9.4747	9.4529
1933	470	6.8	A	1 28 13.16	+3.177	—0.003	11 55 04.8	+18.59	0.00	1.2692	9.5746n	9.5403	9.2830
1934	474	6.4	B	28 49.27	3.634	—0.001	48 05 00.8	18.57	.	1.2687	9.5774n	7.9367	9.8382
1935	476	6.7*	A	29 05.56	3.198	+0.001	14 01 17.7	18.56	0.00	1.2685	9.5787n	9.5174	9.3507
1936	477	6*	B	29 08.86	3.224	.	16 47 34.6	18.55	.	1.2685	9.5789n	9.4855	9.4271
1937	480	4*	B	1 29 27.92	+3.510	—0.015	40 46 46.7	+18.54	—0.37	1.2682	9.5804n	8.9031	9.7811
1938	482	6*	B	1 29 58.15	+3.869	.	57 20 22.7	+18.53	.	1.2678	9.5827n	8.9441n	9.9809
1939	487	4.3*	AA	30 19.61	3.641	+0.006	47 59 38.4	18.52	—0.118	1.2675	9.5843n	7.7009	9.8364
1940	488	6.5*	A	30 28.38	3.174	—0.005	11 30 05.3	18.51	+0.046	1.2674	9.5850n	9.5422	9.2650
1941	490	7.5	B	31 01.82	3.176	+0.011	11 26 24.0	18.49	—0.013	1.2670	9.5875n	9.5423	9.2622
1942	492	6.5*	A	1 31 51.57	+3.570	—0.001	43 44 57.3	+18.46	—0.002	1.2663	9.5912n	8.6398	9.8039
1943	Gr. 357	7.0	C	1 32 17	+3.8	. .	53 13 59.2	+18.45	.	1.2660	9.5931n	8.7344n	9.8675
1944	F. 263	7.4	B	32 20.42	4.264	+0.113	66 17 02.8	18.45	—0.257	1.2659	9.5934n	9.2659n	9.9254
1945	495	6.8	B	32 31.14	3.222	—0.002	15 59 25.2	18.44	—0.02	1.2658	9.5942n	9.4898	9.4037
1946	496	7.5	A	32 33.66	3.199	+0.004	13 39 02.4	18.44	—0.02	1.2657	9.5944n	9.5170	9.3365
1947	500	6.7*	A	1 32 56.23	+3.220	+0.003	15 46 15.0	+18.43	—0.006	1.2654	9.5960n	9.4918	9.3975
1948	498	6*	A	1 33 06.37	+4.341	+0.001	67 24 34.6	+18.42	—0.014	1.2653	9.5968n	9.2970n	9.9285
1949	501	6*	C	33 09.99	3.558		42 39 53.1	18.42		1.2652	9.5970n	8.7129	9.7941
1950	502	5.6*	A	33 12.46	3.514	. .	39 56 35.4	18.42	—0.02	1.2652	9.5972n	8.8959	9.7706
1951	499	6.7*	A	33 16.04	4.523	+0.010	69 59 23.1	18.42	—0.021	1.2652	9.5975n	9.3492n	9.9360
1952	508	6.8	C	34 01.32	3.924	0.010	57 59 41.3	18.39	. .	1.2645	9.6008n	9.0345n	9.8908
1953	510	6.5*	A	1 34 10.82	+3.552	+0.074	41 59 07.3	+18.38	—0.122	1.2644	9.6014n	8.7428	9.7877

Cat. No.	Number and Catalogue.	Mag.	Class.	Right ascension, 1875.0.	Annual precession.	Proper motion.	Declination, 1875.0.	Annual precession.	Proper motion.	Log. a'.	Log. b'.	Log. c'.	Log. d'.
				h. m. s.			° ′ ″						
1954	509	7.0	C	1 34 11.04	+3.993		59 54 55.4	+18.38	−0.04	1.2644	9.6015n	9.1078n	9.8994
1955 I,	145	6.0	C	34 20	3.3	.	25 06 48.6	18.38	0.04	1.2643	9.6022n	9.3484	9.5899
1956	514	6*	A	34 35.57	3.373	. .	29 24 50.5	18.37	−0.018	1.2641	9.6033n	9.2576	9.6611
1957	516	6*	A	34 50.19	3.442	. .	34 36 50.7	18.36	.	1.2639	9.6043n	9.1096	9.7160
1958	515	6*	B	1 34 53.14	+3.999	+0.008	59 55 10.9	+18.36	−0.043	1.2638	9.6045n	9.1160n	9.8989
1959	519	7.5	B	1 35 3.03	+3.368	. .	28 52 23.4	+18.35	−0.03	1.2637	9.6052n	9.2681	9.6454
1960	523	5.6*	B	35 42.80	3.265	−0.020	19 39 36.1	18.33	−0.66	1.2631	9.6081n	9.4348	9.4879
1961	524	7.8	B	35 43.08	3.218	. .	15 08 48.1	18.33	. .	1.2631	9.6081n	9.4954	9.3781
1962	522	4*	A	35 50.07	3.719	+0.006	50 03 28.8	18.32	0.027	1.2630	9.6086n	8.5156n	9.8455
1963	525	6.4	A	1 36 3.25	+3.905	.	56 54 25.5	+18.32	−0.04	1.2628	9.6095n	9.0171n	9.8838
1964 Gr.	374	6.8	C	1 36 49	+3.6	. .	45 30 39.6	+18.29	.	1.2622	9.6128n	8.0629	9.8134
1965	533	6.7*	B	38 6.21	3.267	−0.006	19 27 29.6	18.24	−0.09	1.2611	9.6182n	9.4327	9.4815
1966	535	6.7*	A	38 43.72	4.178	+0.088	63 14 03.4	18.22	0.258	1.2606	9.6207n	9.2491n	9.9092
1967	538	6*	B	39 48.11	3.241	−0.001	16 47 09.1	18.18	.	1.2596	9.6251n	9.4677	9.4180
1968	540	6.7*	B	1 40 8.00	+3.649	.	45 36 20.7	+18.17	−0.08	1.2593	9.6265n	7.0715	9.8112
1969	542	6.8	C	1 40 31.28	+3.173	. . .	10 13 07.9	+18.15		1.2590	9.6280n	9.5461	9.2058
1970	544	6.0	B	41 16.56	3.507	+0.010	37 19 46.5	18.13	. .	1.2583	9.6311n	8.9329	9.7389
1971	546	6.5*	A	41 24.26	3.239	+0.004	16 19 56.6	18.12	−0.008	1.2582	9.6316n	9.4713	9.4050
1972	547	6*	B	41 30.41	3.692	. .	47 16 24.3	18.12	. .	1.2581	9.6320n	8.3101n	9.8220
1973	549	6.0	A	1 41 34.66	+3.240	−0.004	16 23 48.2	+18.12	+0.051	1.2580	9.6323n	9.4701	9.4066
1974	555	6.7*	B	1 42 57.39	+3.796	.	51 18 58.0	+18.06	−0.10	1.2568	9.6378n	8.8313n	9.8471
1975	556	6*	A	43 14.32	3.302	. .	21 39 13.0	18.05		1.2565	9.6389n	9.3849	9.5214
1976	558	6*	C	43 47.33	3.892	+0.002	54 31 38.4	18.03	. .	1.2560	9.6410n	9.0193n	9.8647
1977	560	6*	C	44 12.88	3.775	+0.001	50 10 26.1	18.01	−0.043	1.2556	9.6427n	8.7740n	9.8388
1978	561	6*	A	1 44 14.03	+3.179	−0.006	10 25 24.5	+18.02	−0.04	1.2556	9.6428n	9.5406	9.2109
1979	562	6.7*	A	1 44 51.79	+3.795	−0.002	50 51 22.2	+17.99	0.00	1.2550	9.6452n	8.8368n	9.8425
1980 I,	191	7.7	C	45 24	3.2	.	10 11 31.4	17.97	. .	1.2545	9.6472n	9.5422	9.2002
1981	564	3.4*	A	45 25.30	4.239	+0.057	63 03 11.5	17.97	−0.022	1.2545	9.6473n	9.2991n	9.9024
1982	566	6*	A	45 47.80	3.572	−0.002	40 06 42.6	17.95	0.012	1.2541	9.6488n	8.6519	9.7611
1983	569	4.3*	A	1 45 57.56	+3.401	+0.002	28 58 08.3	+17.95	−0.235	1.2540	9.6494n	9.2137	9.6370
1984	568	5*	A	1 46 18.95	+4.556	−0.002	68 04 11.6	+17.94	−0.01	1.2537	9.6507n	9.4031n	9.9189
1985	572	4.3*	A	46 40.36	3.274	+0.005	18 40 48.2	17.92	0.10	1.2533	9.6521n	9.4269	9.4567
1986	573	4.3*	A	46 40.36	3.274	+0.005	18 40 56.8	17.92	−0.10	1.2533	9.6521n	9.4269	9.4567
1987 Gr.	400	7.0	C	47 08	3.6	.	40 02 24.1	17.90	. .	1.2529	9.6538n	8.6264	9.7592
1988	575	6.0	C	1 47 22.90	+3.579	−0.001	40 05 19.5	+17.89	−0.05	1.2526	9.6548n	8.6136	9.7594
1989	576	6.4	A	1 47 34.71	+3.519	.	36 30 47.9	+17.88	. .	1.2524	9.6555n	8.9008	9.7248
1990	577	3*	AA	47 44.23	3.294	+0.007	20 11 46.3	17.88	0.107	1.2523	9.6563n	9.4017	9.4882
1991	579	5.8	A	48 31.00	3.525	0.002	36 39 50.1	17.84	−0.002	1.2515	9.6590n	8.8795	9.7254
1992	580	5.8	A	48 44.01	3.525	+0.014	36 38 15.5	17.84	+0.01	1.2513	9.6598n	8.8782	9.7249
1993	581	6*	A	1 48 52.90	+3.330	−0.001	22 57 49.1	+17.84	−0.007	1.2512	9.6603n	9.3445	9.5402
1994 L. L.	3536	7.0	C	1 49 36	+4.0		59 00 53.7	+17.80		1.2505	9.6630n	9.2334n	9.8814
1995 Ll.	3533	6.6	C	49 42	4.1		61 05 11.7	17.80		1.2504	9.6633n	9.2864n	9.8904
1996	587	6.8	C	50 10.03	3.722		46 29 02.6	17.78	.	1.2499	9.6550n	8.5630n	9.8082
1997	588	6.7*	B	50 25.97	4.342	.	64 00 43.3	17.77	0.00	1.2497	9.6660n	9.3550n	9.9012
1998	592	6.5*	A	1 50 31.42	+3.263	+0.003	17 12 23.1	+17.76	−0.016	1.2496	9.6663n	9.4429	9.4184
1999	590	6*	C	1 50 37.54	+3.775	+0.002	48 35 30.6	+17.76	+0.005	1.2495	9.6667n	8.7865n	9.8224
2000 I,	213	6.7*	C	50 38	3.4	. .	27 11 41.1	17.76	−0.07	1.2495	9.6667n	9.2400	9.6072
2001	593	5*	A	50 57.93	3.335	−0.009	22 59 06.9	17.75	−0.027	1.2491	9.6679n	9.3378	9.5386
2002 Ll.	3606	7.0	C	52 01	4.1	. .	59 21 08.4	17.71		1.2481	9.6717n	9.2619n	9.8806
2003	607	6.7*	B	1 52 39.52	+3.306	+0.010	20 27 02.5	+17.68		1.2474	9.6740n	9.3832	9.4886
2004	609	6*	A	1 52 44.48	+3.202	. . .	11 41 14.3	+17.68	−0.05	1.2473	9.6742n	9.5175	9.2518
2005	610	6*	A	53 35.08	4.391	+0.003	64 17 47.6	17.64	0.014	1.2465	9.6772n	9.3808n	9.8991
2006	611	6.7*	B	53 46.24	4.364	−0.002	63 47 06.1	17.63	0.00	1.2463	9.6779n	9.3723n	9.8970
2007	614	5*	C	53 59.26	3.945	+0.003	53 52 54.6	17.63	0.026	1.2461	9.6786n	9.1127n	9.8512
2008	620	6.5	B	1 55 17.46	+4.422	.	64 30 04.7	+17.57	−0.07	1.2447	9.6831n	9.3950n	9.8980
2009	624	6.5*	B	1 55 40.14	+3.486	+0.003	32 40 49.8	+17.55	−0.014	1.2443	9.6844n	9.0175	9.6745
2010	628	2.3*	AA	56 13.88	3.650	+0.001	41 43 43.5	17.53	−0.05	1.2437	9.6864n	6.7236	9.7648
2011	629	7.0	C	56 17.49	3.191	. .	10 24 56.0	17.53	. .	1.2437	9.6865n	9.5301	9.1987
2012	630	6*	A	56 33.85	3.379	+0.011	25 19 55.3	17.52	+0.004	1.2434	9.6875n	9.2644	9.5725
2013	632	6.7*	A	1 56 51.42	+3.279	.	17 39 06.0	+17.50		1.2431	9.6885n	9.4240	9.4227
2014	637	6.0	A	1 57 16.33	+3.380	. .	25 19 06.6	+17.48	−0.03	1.2426	9.6899n	9.2620	9.5716
2015	644	6.5*	A	59 34.38	3.341	+0.004	22 03 05.1	17.38	−0.040	1.2402	9.6976n	9.3325	9.5125
2016	645	7.2	A	59 37.63	3.385	.	25 13 59.4	17.38	.	1.2401	9.6977n	9.2551	9.5677
2017	647	6.7*	A	59 44.19	3.384	−0.001	25 06 26.4	17.38	−0.017	1.2400	9.6981n	9.2580	9.5655
2018	646	6.5	C	1 59 57.72	+4.133	−0.005	57 49 38.4	+17.37	−0.02	1.2397	9.6988n	9.2834n	9.8652

(1985) B. A. C. 572. The right ascension refers to the middle point between 572 and 573.

DETAILS OF POSITIONS—DIVISION I.

BRITISH ASSOCIATION CATALOGUE STARS.

DECLINATION +10° TO 20°.

No.	Authority.	Right ascension.			Declination.			Remarks.
		h.	*m.*	*s.*	°	′	″	
4079	Tayl.	12	0	48.03	10	21	33.9	I have used P. M. + 0″.025, which represents Piazzi within +1″.0 and Lalande to + 0″.1 [C − O]. Both A. R. and decl. are rather uncertain.
	Arm.			47.80			34.7	
	Q.			47.63$_2$			32.0$_1$	
	Main			47.62			32.1$_2$	
	Ad.			47.77			33.1	
4081	Yarn.	12	1	12.80$_2$	14	12	45.9	P. M. assumed zero.
	Q.			12.81			45.3	
	Kbg.			12.64$_1$			44.3$_1$	
	Main			12.69			44.2	
	Ad.			12.74			45.0	
4099	Mädl.	12	4	[9.91]	17	30	19.0	Mädler's P. M. in A. R. has been omitted and his A. R. excluded.
	Arm.			9.26			19.4	
	Ay. 64			9.29			17.7	
	Wn. 67			9.38			18.4	
	Main			9.30			18.8	
	Ay. 72			9.22$_2$			18.7$_2$	
	Ad.			9.29			18.6	
4114	Mädl.	12	7	4.04	10	57	28.6	
	Arm.			3.93			29.6	
	Q.			3.97			27.3$_2$	
	Ay. 64			4.00			29.1	
	Main			4.12			28.2	
	Yarn.			4.00			28.3$_2$	
	Ad.			4.01			28.6	
4125	Mädl.	12	9	39.27	15	35	43.0	
	Arm.			39.23			42.7	
	Ay. 60			39.31			42.5$_9$	
	Q.			39.27			41.9$_2$	
	Ad.			39.27			42.4	
4156	Mädl.	12	14	24.03	18	29	2.4	
	Arm.			24.08			2.4	
	Ay. 60			24.03			1.7	
	Q.			23.91$_1$		28	59.6$_2$	
	Ad.			24.03		29	1.4	
4218	Stru. P. M.	12	24	12.66	10	24	31.4	P. M. in decl. used − 0″.055 C − O (Lal.) = + 0″.5, 2 obs.
	Arm.			12.58$_2$			31.6	
	Q.			12.76$_2$			29.9$_2$	
	Main			12.66			31.4	
	Ad.			12.66			31.1	
4228	Mädl.	12	26	43.29	10	59	[5.0]	Mädler is manifestly in error. Taylor gives 8″.1 with the adopted P. M. − 0″.007.
	Arm.			43.17			7.2	
	Schj.			43.21$_2$			8.7$_2$	
	Ay. 64			43.25			7.5	
	Main			43.25			8.5	
	Ad.			43.24			8.0	
4242	St.	12	28	51.62	19	3	55.5	St. and Pulc. have each received double weight.
	Yarn.			51.51			55.1	
	Main			51.68			55.5	
	Pulc.			51.52			55.8	
	Ad.			51.58			55.5	
4248	Mädl.	12	30	42.20	17	46	42.7	
	Arm.			42.26			43.4	
	Ay. 64			42.25			42.6	
	Main			42.20			43.0	
	Ad.			42.23			43.0	
4267	Mädl.	12	35	16.44	11	6	43.8	
	Arm.			16.24			44.1	
	Ay. 64			16.46			45.0	
	Main			16.50			45.1	
	Ad.			16.41			44.7	

No.	Authority.	Right ascension.			Declination.			Remarks.
		h.	*m.*	*s.*	°	′	″	
4271	Mädl.	12	35	33.37	10	55	28.8	The observations since Arm. are very numerous. Weights for Ay. 60 and Main, 1½; for Ay. 64, 2.
	Arm.			33.42			29.6	
	Ay. 60			33.41			30.7	
	Ay. 64			33.46			29.3	
	Main			33.44			29.9	
	Ay. 70			33.44			29.3	
	Ad.			33.43			29.8	
4288	Mädl.	12	40	1.61	10	14	19.0	
	Arm.			1.38			20.6	
	Q.			1.50_{13}			20.8_{9}	
	RC_2.			1.39_{10}			20.6	
	Ay. 60			1.47			21.2	
	Ad.			1.47			20.8	
4290	Rümk.	12	40	23.95	17	15	36.7	Double weight given to Ay. 60. Piazzi gives decl. 1875.0 = 37″.8.
	Arm.			23.97			38.4	
	Ay. 60			24.05			38.6	
	Ad.			23.99			38.1	
4292	Mädl.	12	40	55.95	12	38	29.5	
	Arm.			55.92			31.1	
	Q.			56.01			30.5_{2}	
	Ay. 64			56.07			30.9	
	Main			56.06			30.6	
	Ad.			56.00			30.8	
4299	Mädl.	12	41	58.54	14	14	14.5	
	Arm.			58.65			14.1	
	Yarn.			58.66_{14}			11.7	
	Ay. 64			58.67			11.8	
	Main			58.62			12.1	
	Ad.			58.63			12.4	
4301	Mädl.	12	42	38.43	14	48	21.6	
	Arm.			38.24			20.8	
	Yarn.			38.30_{12}			19.0	
	Ay. 60			38.32			19.6_{2}	
	Q.			38.35			18.9_{2}	
	Ay. 64			38.32			19.2	
	Main			38.34			21.7	
	Ad.			38.33			19.9	
4318	Mädl.	12	45	59.18	17	45	16.5	
	Arm.			59.28			17.4	
	Q.			59.24_{2}			15.0	
	RC_2.			59.23			15.1	
	Ay. 64			59.24			16.2	
	Ad.			59.23			16.0	
4319	Mädl.	12	46	9.82	17	47	23.1	
	Arm.			[9.93]			23.2	
	Q.			9.52_{2}			21.3	
	RC_2.			9.71			22.2	
	Ay. 64			9.65			22.5	
	Ad.			9.69			22.3	
4329	Mädl.	12	47	33.58	13	5	54.9	
	Arm.			33.17			54.8	
	Ay. 64			33.35			53.7	
	Main			33.35			53.9	
	Ay. 73			33.24_{1}			55.4_{1}	
	Ad.			33.35			54.4	
4351	Mädl.	12	52	44.41	18	5	2.1	
	Arm.			44.49			1.8	
	Ay. 60			44.50			2.0	
	Ay. 72			44.53			1.6	
	Ad.			44.51			1.8	
4362	Mädl.	12	54	58.77	17	47	53.3	
	Q.			58.80			50.8	
	Ay. 64			58.74			52.2	
	Main			58.74			51.7	
	Ad.			58.76			51.6	

No.	Authority.	Right ascension.			Declination.			Remarks.
		h.	*m.*	*s.*	°	′	″	
4367	St.	12	55	57.23	11	37	53.5	Very frequently observed at Greenwich and Oxford. Weights for Ay. 64 and Main, 1½; for Ay. 70, 2.
	Langier			. .			53.7	
	Arm.			57.43			52.5	
	Yarn.			57.27			52.9	
	Ay. 64			57.26			53.4	
	Main 65			57.24			53.4	
	Main 70			57.27			53.2	
	Ay. 70			57.26			53.7	
	Ad.			57.28			53.3	
4403	Arm.	13	3	39.22$_1$	17	30	58.3$_2$	Piazzi's decl. reduced to 1875.0 is 57″.6. I have assumed no P. M.
	Q.			39.04$_2$			55.8$_2$	
	Ay. 64			39.13			57.3	
	Ay. 68			39.19			57.4$_2$	
	Main			39.18			57.1	
	Ad.			39.15			57.2	
4406	Mädl.	13	3	54.40	18	11	28.6	The position Ay. is combined from the catalogues for 1860 (1 obs.) and 1864 (6 obs.) and 1 obs. in 1872.
	Q.			54.27$_2$			27.9	
	RC$_2$.			54.38			27.3	
	Ay.			54.37			28.3	
	Ad.			54.36			28.1	
4423	Arm.	13	6	19.75	12	13	17.8$_2$	Pi. reduced to 1875.0 (without P. M.) gives 17″.5.
	Yarn.			19.69$_2$			18.5	
	Ay. 60			19.59			17.9$_2$	
	Main			19.88$_2$			17.1$_2$	
	Ad.			19.72			17.9	
4440	Mädl.	13	10	34.36	10	4	41.1	
	Q.			34.20			39.8	
	RC$_2$.			34.22			39.7	
	Ay. 60			34 29			41.0	
	Ay. 64			34.29			40.7	
	Yarn.			34.40$_1$			39.7$_2$	
	Ad.			34.28			40.2	
4444	Arm.	13	11	4.56	14	20	4.1	P. M. +0″.05 gives C−O Lal. +0″.3, Pi. +0″.1, Tayl. +0″.3.
	Q.			4.64$_2$			2.2$_2$	
	Ay. 64			4.61			3.3	
	Wn. 67			4.67$_2$			3.9	
	Main			4.70			3.0	
	Ad.			4.63			3.4	
4448	Q.	13	11	27.94$_2$	14	25	21.2	I have used P. M. +0″.03 C−O Pi. 0″.0, Lal. +1″.6, Tayl. −0″.4.
	Wn. 67			27.97$_2$			23.9$_2$	
	Main			. .			21.7$_1$	
	Ad.			27.96			22.2	
4468	Jac.	13	15	12.52	14	48	21.1	
	Yarn.			12.64$_2$			20.0	
	Ay. 60			12.62			20.6$_2$	
	Q.			12.64			20.4	
	Smyth			12.75			20.9$_2$	
	Ad.			12.63			20.6	
4499	Mädl.	13	22	19.03	14	26	49.3	
	Arm.			19.03			[55.4]	
	RC$_2$.			18.92			48.8$_2$	
	Ay. 60			19.11$_2$			49.1	
	Q.			18.92			48.9	
	Ay. 64			18.95			50.3	
	Ay. 70			18.91			50.2$_{11}$	
	Ad.			18.99			49.5	
4504	Mädl.	13	23	1.46	11	28	2.2	
	Ay. 64			1.43			1.8	
	Yarn.			1.47			2.0	
	Main			1.41			1.6	
	Wn. 67			1.45$_2$			2.1$_2$	
	Ad.			1.44			1.9	
4509	Tayl.	13	23	58.24	19	42	17.2	I have used P. M. +0″.09 in decl., which gives C−O (Pi.) −0″.3.
	Rümk.			58.44$_2$			15.5$_2$	
	Q. 65			. .			16.9$_2$	
	Ad.			58.32			16.6	

No.	Authority.	Right ascension.	Declination.	Remarks.
		h. m. s.	° ′ ″	
4559	Jac.	13 33 24.83	11 22 55.8	
	Ay. 60	24.87$_2$	54.9	
	Main	24.90	54.7	
	Smyth	24.96	55.2	
	Ad.	24.91	55.2	
4597	St.	13 41 19.36	18 4 50.4	Weights: 2 to Ay. 64, 1½ to Ay. 70, A. R., and Main. Observations very numerous.
	Arm.	19.41	49.6	
	Yarn.	19.38$_2$	51.5$_2$	
	Ay. 64	19.35	50.2	
	Main 65	19.40	50.7	
	Ay. 70	19.32	50.4	
	Main 70	19.34	50.7	
	Ad.	19.36	50.5	
4615	Mädl.	13 43 26.83	16 25 6.9	
	Arm.	26.82	8.2	
	Ay. 50	26.88	7.1	
	Yarn.	26.95	7.1	
	Ay. 72	26.86$_2$	7.8	
	Ad.	26.87	7.5	
4621	Jac.	13 44 8.20	19 15 5.2	
	Ay. 60	8.31$_2$	5.3$_2$	
	Main	8.40	4.0	
	Smyth	8.40	4.7	
	Ad.	8.33	4.8	
4634	Ay. 60	13 46 32.24	17 20 52.8	Seconds of decl. for 1875.0: D'Ag., 56.0, 2 obs.; Lal., 52.5, 1 obs.; Piazzi, 52.3, 13 obs.
	RC$_2$.	32.16	52.4	
	Ay. 64	32.14	52.6	
	Ay. 70	32.17$_2$	51.8	
	Ad.	32.18	52.4	
4637	Mädl.	13 47 14.56	18 32 59.0	
	Arm.	14.58	60.2	
	Ay. 64	14.56	58.6	
	Main	14.65	59.6	
	Ad.	14.59	59.3	
4648	St.	13 48 43.96	19 1 30.7	Authorities after RC$_2$. all have double weight.
	Laugier	. .	30.3	
	RC$_2$.	44.00	29.7	
	Yarn.	43.97	30.9	
	Ay. 64	43.97	30.4	
	Main 65	43.97	30.8	
	Main 70	43.95	29.9	
	Ay. 70	43.96	30.1	
	Wn. 70 (67)	. .	30.6	
	Arg.	43.96	30.9	
	Eng.	44.02	31.0	
	Ad.	43.97	30.5	
4662	Tayl.	13 52 38.14	15 15 39.1	P. M. in decl. − 0″.05 gives C−O for Pi. −0″.7, for Lal. +0″.4. There may also be P. M. in A. R.
	Arm.	37.95	38.5	
	Ay. 64	37.81	38.7	
	Main	37.84	39.3	
	Ad.	37.82	38.4	
4721	Mädl.	14 8 4.60	13 32 48.4	
	Arm.	4.58$_1$	46.2$_2$	
	Yarn.	4.55$_2$	47.2	
	RC$_2$.	4.65$_2$	47.0$_1$	
	Kbg.	4.69$_1$	46.9$_1$	
	Ay. 64 and 72	4.49	48.5	
	Ad.	4.55	47.6	
4724	Mädl.	14 8 43.73	10 41 24.7	
	Arm.	43.72$_2$	23.8	
	RC$_2$.	43.68$_2$	25.6$_1$	
	Kbg.	43.78$_1$	26.6$_1$	
	Schj.	43.43$_1$	26.1$_1$	
	Ay. 64	43.63	25.1	
	Ad.	43.67	25.1	

No.	Authority.	Right ascension.			Declination.			Remarks.
		h.	*m.*	*s.*	°	′	″	
4729	St.	14	9	57.60	19	50	3.5	
	Yarn.			57.60			3.3	
	Ay. 60 -			57.63			3.1	
	Ay. 64 -			57.59			3.4	
	Gyld. - -			. .			2.7	
	Main 65			57.63			2.5	
	Wn. 70			57.64			2.9	
	Main 70 -			57.63			2.8	
	Leiden			. .			3.5	
	Ad. -			57.61			3.1	
4731	Mädl.	14	10	11.57	19	29	42.8	
	Arm.			[11.23]			41.5	
	Yarn.			11.56_2			39.2	
	RC_2. - - - -			11.63			41.8	
	Ay. 64			11.55			41.2	
	Ad. -			11.58			40.9	
4737	Ay. 40 -	14	11	29.80	15	50	33.1	A. R. quite uncertain.
	Jac.			29.52			33.8	
	Smyth -			30.02			33.5	
	Ad. -			29.78			33.5	
4751	Mädl.	14	13	13.42	13	34	56.6	
	Arm.			13.46			55.1	
	Yarn.			13.39_2			54.5	
	RC_2.			13.26			54.0	
	Q.			13.21_1			54.8	
	Kbg.			13.35_2			56.3_2	
	Schj.			13.01_1			56.0_1	
	Ad. -			13.33			55.0	
4753	Mädl. -	14	13	50.26	16	52	51.7	
	Arm.			50.36			50.1	
	RC_2.			50.22			50.6	
	Kbg.			50.23_2			50.6_2	
	Q. -			50.32_1			49.9_2	
	Ay. 64 -			50.33			49.6	
	Wn. 67			50.34			49.2	
	Ay. 73 - -			50.20_1			50.7	
	Ad.			50.29			50.1	
4785	Mädl. - -	14	20	38.64	19	47	23.4	Authorities since RC_2. have weight = $1\frac{1}{2}$. Observations are very numerous.
	Arm.			38.68			24.6	
	RC_2.			38.48			24.8_2	
	Ay. 60 -			38.54			24.4	
	Ay. 64 -			38.54			23.7	
	Main 65			38.58			24.2	
	Main 70			38.59			23.9	
	Ay. 70 -			38.53			24.1	
	Ad. -			38.57			24.1	
4846	Arm.	14	34	43.60	14	4	21.8	The older authorities do not agree well. I have assumed P. M. = 0.
	Ay. 50 -			43.76			23.2	
	Kbg.			43.93			21.2	
	Ay. 64 -			43.77			22.6_2	
	Q.			43.70			20.5_2	
	Ad.			43.75			21.9	
4847	St.	14	34	51.08	16	57	18.8	
	Arm.			51.04			19.0	
	Kbg.			50.98			18.2	
	RC_2.			51.09			19.4	
	Yarn.			51.12_2			19.2_2	
	Main			50.97			19.2	
	Ad. -			51.05			18.9	
4849	St.	14	35	10.79	14	15	55.9	
	Laugier			. .			57.6	
	Yarn.			10.83_1			54.3_2	
	Main			10.80			56.7_{12}	
	Ay. 72			10.76			56.1	
	Ad. -			10.79			56.2	

No.	Authority.	Right ascension.			Declination.			Remarks.
		h.	*m.*	*s.*	°	′	″	
4853	Mädl.	14	35	43.20	12	12	1.3	
	Ay. 40–45			43.18			1.8	
	Arm.			43.15			2.0	
	Kbg.			43.26_2			2.5_2	
	Ad.			43.20			2.0	
4873	Mädl.	14	39	24.62	17	29	46.5	Mädler's decl. is manifestly wrong.
	Arm.			24.69			42.2	
	Yarn.			24.55_2			40.8	
	Ay. 60			24.49			40.9	
	Kbg.			24.54_2			42.1_2	
	Ay. 64			24.54_{11}			40.5_2	
	Ad.			24.58			41.3	
4905	Mädl.	14	45	37.51	19	37	11.3	Mädler's decl. about 2″ to 3″ too far south. The companion is 7^m and about 4″ n. p.
	Arm.			$[37.31_1]$			13.7	
	Ay. 50			37.48			12.7	
	RC_2.			37.43			15.1	
	Q.			37.43_2			12.2	
	Wo. 67			37.49			13.7	
	Main			37.49			14.5	
	Ay. 72			. .			15.0_2	
	Ad.			37.47			13.8	
4926	St.	14	50	19.33	14	57	10.4	
	Main			19.28			10.9	
	Pulc.			19.26			9.7	
	Ad.			19.29			10.2	
4933	Arm.	14	51	21.90_1	16	53	33.0	Decl. 1875.0 from D'Ag., 34″.1, 3 obs.; Lal., 32″.2, 1 obs.; Pi., 33″.2, 12 obs.; Tayl., 34″.7, 4 obs.
	Kbg.			22.01_2			33.9_2	
	Q.			21.98_2			33.3_2	
	Ay. 64			21.92_2			32.8_2	
	Ay. 72			. .			33.7	
	Ad.			21.96			33.3	
5067	Mädl.	15	16	28.14	13	0	59.6	
	Arm.			28.25			59.8_1	
	Kbg.			28.15_1			60.6_1	
	Ay. 64 and 73			28.05			58.5	
	Main			28.18			58.2	
	Ad.			28.15			58.9	
5085	St.	15	19	59.54	15	52	8.4	
	Yarn.			59.57			7.5_2	
	Pulc.			59.54			9.0	
	Ad.			59.55			8.6	
5120	Mädl.	15	26	24.02	16	28	54.6	
	Arm.			. .			53.7_2	
	Kbg.			24.08_1			51.6_1	
	Ay. 64			24.08			52.8	
	Main			24.22			53.7	
	Ad.			24.10			53.1	
5126	Mädl.	15	27	18.91	16	26	11.9	Piazzi's decl. gives a positiye P. M., Bradley's a negative P. M. I have assumed zero.
	Tayl.			. .			10.6	
	Arm.			19.19			10.4	
	Ay. 64			18.98			9.1	
	Main			19.00			10.4	
	Ad.			19.02			10.1	
5132	Tayl.	15	28	10.67	17	33	39.7	Seconds of decl.: Lal., 43″.6; Pi., 39″.2.
	Arm.			. .			41.2_1	
	Main			10.55			38.1	
	Ad.			10.61			39.4	
5135	Mädl. *corrected*	15	28	50.04	10	57	29.2	Pulc. has double weight. The companion is about 3″ south.
	Pulc.			49.93			29.3	
	Ay. 50			49.94			29.5	
	Kbg.			49.65_1			30.7_1	
	Main			49.84			29.7_2	
	Ad.			49.91			29.6	

No.	Authority.	Right ascension.			Declination.			Remarks.
		h.	*m.*	*s.*	°	′	″	
5146	Mädl.	15	29	52.70	18	4	24.4	The star needs re-observing.
	Ay. 45			- -			24.2	
	Arm.			[53.13]			25.6	
	Yarn.			52.82			22.5	
	Ad.			52.76			24.1	
5150	Tayl.	15	30	29.25	10	25	50.1	P. M. used — 0″.04 by comparison with Piazzi. Place rather uncertain.
	Hend.			29.11			52.3	
	Arm.			29.01_1			50.8	Pulc. gives 49″.6, which is included in final result.
	Q.			29.14			49.4_1	
	Ad.			29.15			50.5	
5152	Mädl.	15	30	40.73	15	30	58.4	
	Arm.			- -			59.0	
	Ay. 64			40.75			58.0	
	Main			40.76			59.5	
	Ad.			40.75			58.8	
5153	Mädl.	15	30	43.68	16	32	4.6	Br. has no decl. Piazzi agrees well with P. M. = 0.
	Tayl.			- -			3.6	
	Arm.			43.76_1			2.8	
	R. C.$_2$			43.61_1			2.0	
	Q.			43.65_1			3.1_1	
	Ad.			43.68			2.8	
5180	Mädl.	15	35	14.28	16	25	46.7	
	Ay. 64			14.34			45.1	
	Main			14.25			44.6	
	Yarn.			14.17_2			45.2_2	
	Ay. 72			14.40_2			44.4_2	
	Ad.			14.29			44.8	
5185	Mädl.	15	35	54.54	13	15	2.9	
	Kbg.			54.26_2			0.3_2	
	Yarn.			54.48_2		14	58.4	
	Q.			54.40			57.9_2	
	Main			54.55		15	1.0	
	Ad.			54.46		14	59.5	
5189	Mädl.	15	36	[17.07]	18	51	50.8	
	Arm.			$[16.95_1]$			40.7_1	
	Kbg.			17.25_1			49.4_1	
	Ay. 64			17.22			49.6	
	Main			17.36			48.6	
	Q.			17.32_1			49.0_2	
	Ad.			17.29			49.2	
5203	Mädl.	15	39	1.43	17	39	33.8	
	Arm.			1.57			32.2_1	
	Q.			1.42_2			30.4_2	
	Ay. 64			1.45			32.4	
	Main			1.31_2			31.0	
	Ad.			1.44			31.5	
5216	St.	15	40	25.14	15	48	52.3	
	Arm.			25.22			52.6	
	Q.			25.10_{15}			51.4_2	
	Kbg.			25.12_2			52.2_2	
	Ay.			25.16			52.1	
	Main			25.24			52.1	
	Yarn.			25.03_1			50.9_2	
	Ad.			25.15			52 1	
5219	Mädl.	15	40	39.01	15	55	9.1	
	Arm.			- -			1.7	
	Q.			38.90		54	59.7_2	
	Ay. 64			39.03		55	0.7	
	Main			39.08			0.9	
	Ad.			39.00			0.8	
5223	Tayl.	15	41	29.18	14	30	8.3	c. — o. in decl.: Lal. — 1″.6; Pi. + 0″.3. Adopted P. M. + 0″.06. There is perhaps some P. M. in A. R.
	Arm.			29.17			9.8	
	Yarn.			29.05_2			7.6	
	Q.			29.04			7.6	
	Main			29.02			8.2	
	Ad.			29.09			8.3	

No.	Authority.	Right ascension.			Declination.			Remarks.
		h.	*m.*	*s.*	°	′	″	
5234	St.	15	43	6.82	18	31	45.2	
	Arm.			6.74			45.5$_1$	
	Yarn.			6.81$_2$			43.2	
	Kbg.			6.74$_2$			45.2$_2$	
	Ay.			6.80			45.0	
	Q.			. .			44.0$_1$	
	Ad.			6.79			44.8	
5262	Mädl.	15	47	22.88	13	35	20.9	
	Arm.			. .			22.6	
	Q.			22.73			23.0$_2$	
	R. C.$_2$			22.90			21.4$_2$	
	Kbg.			22.96$_1$			23.8$_1$	
	Ay. 64			22.81			21.9	
	Ad.			22.85			22.4	
5284	St.	15	50	40.82	16	4	15.9	Weights: for Q, 1½; Ay. 64, 2, 1; Main 65, 1½; Main 70, 1, 1½; Ay. 70, 1½, 1.
	Arm.			40.80			17.0$_2$	
	Q.			40.24			15.4	
	Yarn.			40.96$_1$			15.3$_2$	
	Ay. 64			40.80			16.0	
	Main 65			40.76			16.3	
	Main 70			40.75			16.2	
	Ay. 70			40.78			16.0	
	Ad.			40.79			16.0	
5293	Tayl.	15	51	[28.99]	14	46	27.8	P. M. used + 0″.10, C. — O. Lal. — 1″.6 (2 obs.), Pi. + 0″.8.
	Yarn.			28.67$_2$			28.3$_2$	
	Kbg.			28.67$_1$			27.3$_1$	
	Wn. 67			28.66$_3$			27.2	
	Main			28.72$_2$			27.9$_2$	
	Ad.			28.68			27.8	
5315	Mädl.	15	55	37.29	18	9	55.8	
	Arm.			37.31			55.5	
	Yarn.			37.21$_2$			56.0	
	R. C.$_2$			37.41			56.8	
	Q.			37.25			54.9$_1$	
	Ay. 64			37.32			55.7	
	Ay. 72			37.31			55.1	
	Ad.			37.30			55.7	
5344	Mädl.	15	59	54.20	10	16	28.3	Mädler's P. M. and decl. manifestly in error.
	Tayl.			. .			33.1	
	Arm.			54.20$_1$			34.8$_1$	
	Main			54.23			34.6	
	Ad.			54.21			34.0	
5359	Mädl.	16	1	39.60	10	13	39.7	
	Arm.			39.52			38.7$_1$	
	Ay. 64			39.49$_9$			40.3	
	Yarn.			39.48$_1$			39.2$_2$	
	Main			39.60$_2$			39.6	
	Ad.			39.53			39.6	
5361	Mädl.	16	2	[7.81]	10	24	56.9	
	Arm.			8.18			[53.6$_1$]	
	Q.			8.14$_1$			56.2$_2$	
	Schj.			8.20$_1$			55.3$_1$	
	Ay. 64			8.11			58.1	
	Main			8.15			59.2	
	Ad.			8.15			57.5	
5367	Mädl.	16	2	25.96	17	22	52.8	
	Yarn.			26.06$_2$			51.6	
	R. C.$_2$			25.95$_1$			53.6	
	Q.			25.98$_2$			51.8$_2$	
	Ay. 64			26.00			53.0	
	Wn. 67			26.00			52.2	
	Main			26.06$_2$			54.5$_2$	
	Ay. 72			26.02			53.3	
	Ad.			26.00			52.8	
5368	Ad.	16	2	26.30	17	23	23.2	From the preceding by differences of A. R. and decl.

No.	Authority.	Right ascension.			Declination.			Remarks.
		h.	*m.*	*s.*	°	′	″	
5376	Mädl.	16	3	8.46	17	32	22.0	
	Arm.			8.54			21.3	
	Yarn.			8.40_2			19.0	
	Ay. 64			8.55			20.0	
	Main			8.46			19.8	
	Ad.			8.49			20.0	
5392	Mädl.	16	5	49.17	16	59	27.3	Pulc. gives 26″.4; no sensible change is made by adding this result.
	Ay. 45			. .			26.6	
	Ay. 50			49.25			26.5_2	
	Yarn.			49.26_2			24.9_2	
	Q.			49.11_2			25.3_2	
	Ad.			49.20			25.9	
5410	Mädl.	16	7	[28.98]	13	51	46.4	The position refers to the middle point between the components. The difference is about $0^s.21$ and 3″.0.
	Arm.			. .			46.1	
	Q.			28.77			44.3	
	R. $C._2$			28.80			45.5	
	Ay. 64			28.80			45.5	P. M. in A. R. from the Abo catalogue.
	Ad.			28.79			45.6	
5422	Tayl.	16	9	7.66_2	11	48	30.1	P. M. used — 0″.06 in decl. c. — o.; Lal., + 2″.4; Pi., — 0″.4.
	Arm.			7.73			33.2_1	
	Ay. 64			7.71_1			31.5_1	
	Main			7.73			31.8	
	Ay. 72			7.76			30.6	
	Ad.			7.72			31.2	
5426	Mädl.	16	9	56.27	19	7	28.6	
	Arm.			. .			32.0_2	
	Yarn.			56.27_2			29.3	
	Ay. 64			56.32			29.8	
	Wn. 67			56.27_2			31.0	
	Main			56.28			30.3	
	Ad.			56.29			30.5	
5428	Mädl.	16	10	[6.28]	11	44	13.7	
	Arm.			6.46			13.3_1	
	Kbg.			6.61_1			13.6_1	
	Ay. 64			6.60_2			12.6_2	
	Main			6.57_1			13.6_2	
	Ay. 69			6.03			13.4	
	Ad.			6.57			13.3	
5466	St.	16	16	24.36	19	26	52.5	Weights for later observations: Ay. 64, 2, 1½; Main 65, 2; Main 70, 1½; Ay. 70, 1½, 1½.
	Kbg.			24.30			52.6	
	Yarn.			[24.54]			53.0	
	R. $C._2$			24.32			53.4	
	Q.			24.40			53.8	
	Ay. 64			24.36			53.5	
	Main 65			24.40			53.8	
	Main 70			24.36			53.6	
	Ay. 70			24.37			52.8	
	Ad.			24.36			53.2	
5490	St.	16	19	38.74	14	19	22.7	
	Pulc.			38.86			21.1	
	Ay. 73			38.89			21.3	
	Ad.			38.82			21.8	
5504	Jac.	16	22	23.51	15	37	49.6	P. M. assumed = 0. 1 obs. by Lal. gives 47″.2.
	Smyth			23.69			49.6_1	
	Main			23.52			50.1	
	Ad.			23.57			49.8	
5507	Jac.	16	22	42.55	15	42	37.6	I have corrected Smyth by — 10″ and assumed P. M. = 0. Lal. gives 37″.4.
	Q.			42.70_1			36.2_1	
	Smyth			42.75			36.5_1	
	Main			42.75_2			38.2_2	
	Ad.			42.69			37.3	
5529	Q.	16	25	54.55	11	41	39.3_1	The star needs further observations.
	Yarn.			54.56_2			38.4_2	
	Main			54.56_2			40.0_2	
	Ay. 73			54.66_1			42.4_1	
	Ad.			54.57			39.9	

No.	Authority.	Right ascension.			Declination.			Remarks.
		h.	m.	s.	°	′	″	
5532	Mädl.	16	26	45.27	11	45	30.1	Later observations give an increased A. R.; I have provisionally assumed 45ˢ.36.
	Jac.			45.11$_2$			28.2	
	Arm.			45.19			28.0$_1$	
	Yarn.			45.33			28.7	
	Ay. 60			45.33			29.0	
	Schj.			45.30$_1$			29.4$_1$	
	Q.			45.33$_2$			27.8$_1$	
	Kbg.			45.26$_1$			31.9$_1$	
	Main			45.34			29.6	
	Ad.			45.28			29.0	
5537	Jac.	16	27	38.16	10	38	4.6	Two obs. by Lal. give 5″.0 in decl. P. M. assumed zero.
	Q.			38.31			3.9$_2$	
	Main			38.29			3.5	
	Smyth			38.38			3.9	
	Ad.			38.29			4.0	
5563	Tayl.	16	32	2.39	13	56	30.6	c. — o. in decl.: Lal., — 1″.1; Pi., + 0″.2. P. M. used — 0″.04.
	Arm.			2.49			31.2$_1$	
	Q.			2.39			29.8$_2$	
	Main			2.42			31.4	
	Ad.			2.42			30.8	
5587	Tayl.	16	35	[2.52]	12	38	23.6	c. — o.: Lal., + 1″.7 (v. Asten), 2 obs.; Pi., — 0″.8. P. M used + 0″.03. Later observations give 22″.2: P. M. + 0″.02.
	Arm.			. .			22.3	
	Main			2.13			22.0$_2$	
	Schj.			2.20$_1$			24.5$_1$	
	Ad.			2.15			22.9	
5620	Jac.	16	39	[42.56]	15	58	39.1	c. — o.: D'Ag., + 0″.1, 2 obs.; Lal., — 0″.6, 1 obs. P. M. — 0″.07.
	Smyth			42.82$_1$			39.3$_1$	
	Q.			42.81$_1$			39.3$_1$	
	Main			42.91			40.5	
	Wn. 67			42.90			39.0	
	Ad.			42.88			39.4	
5634	Jac.	16	42	13.30	11	21	16.0	1 obs. of Lal. gives 12″.4; perhaps there is P. M. The star needs re-observation.
	Ay. 60			13.45			15.1	
	Q.			13.37			14.7$_2$	
	Smyth			13.50			16.6	
	Main			13.59			17.1	
	Ad.			13.44			16.0	
5647	Jac.	16	43	48.31	13	28	51.2	I have assumed no P. M. 3 obs. of D'Ag. give 52″.9; 1 obs. of Lal., 52″.2; 4 obs. of St., 52″.4. There may be a P. M. of — 0″.02.
	Schj.			48.41			51.2$_2$	
	Main			48.45			52.3	
	Smyth			48.59			51.2	
	Q.			48.34			51.4$_2$	
	Ad.			48.42			51.5	
5674	St.	16	46	23.40	15	11	7.8	
	Pulc.			23.38			8.1	
	Ad.			23.39			7.9	
5686	Ay. 40	16	47	41.01	15	36	55.9	The star needs re-observation.
	Jac.			40.88			57.2	
	Y.			41.13			55.3	
	Q.			41.18$_1$			55.9$_1$	
	Smyth			41.26			57.0$_2$	
	Ad.			41.08			56.2	
5692	Mädl.	16	48	5.60	10	22	22.2	
	Arm.			5.59			23.1	
	Ay. 50			. .			21.7$_2$	
	Yarn.			5.57			20.6	
	Kbg.			5.55			23.4	
	Schj.			5.66$_1$			23.6$_1$	
	Q.			5.55$_2$			20.5$_2$	
	Wn. 67			5.72			22.1	
	Ad.			5.60			22.1	

No.	Authority.	Right ascension.			Declination.			Remarks.
		h.	*m.*	*s.*	°	′	″	
5702	Mädl.	16	49	52.48	18	38	4.5	
	Arm.			52.45			4.7	
	Yarn.			52.52$_2$			2.9$_2$	
	Q.			52.60$_1$			3.8$_2$	
	Ay. 72			52.67$_1$			4.4	
	Ad.			52.52			4.1	
5716	Jac.	16	52	[58.34]	15	38	31.5	The P. M. used in decl. is + 0″.14 from Lal., and rather precarious.
	Yarn.			58.55			30.2	
	Smyth			58.60			30.9	
	Main			58.58			30.6	
	Ad.			58.58			30.8	
5732	Jac.	16	55	51.98	15	8	2.0	1 obs. by Lal. gives 2″.0; 8 by St., 1″.2. The P. M. is manifestly very small.
	Yarn.			52.04			0.5	
	Ay. 60			52.12$_2$			2.2$_2$	
	Q.			52.08			1.1$_1$	
	Main			52.16			2.5	
	Smyth			52.18			1.3	
	Ad.			52.09			1.6	
5749	Mädl.	16	57	24.24	14	16	26.6	
	Ay. 45			. .			25.5	
	Kbg.			24.25$_1$			24.9$_1$	
	Schj.			24.16$_2$			23.8$_2$	
	Ay. 73			24.35$_2$			24.9$_2$	
	Ad.			24.25			24.8	
5753	Mädl.	16	57	54.56	13	47	3.7	The P. M. used is — 0″.03 in decl., which gives c. — o. . for Auwers, + 1″.4, 1 obs.; for Pi., — 2″.1; for C. A., — 0″.8.
	Tayl.						3.0	
	Ay. 40			.			3.6	
	Hend.			. .			5.0	
	Arm.			54.70			4.3	
	Q.			54.57$_2$			4.4$_2$	
	Kbg.			54.76$_1$			3.4$_1$	
	Ad.			54.60			4.0	
5757	Mädl.	16	58	12.82	13	44	55.6	I have employed Mädler's P. M. in decl. = — 0″.164. Auwers gives — 0″.140. Washington 1874-5 gives 12^s.86 56″.3.
	Hend.			. .			54.3	
	Arm.			12.83			56.7	
	R. C.$_2$			12.68			55.7	
	Ad.			12.78			56.0	
5765	St.	16	59	34.94	12	54	51.1	
	Yarn.			34.78$_1$			50.1$_2$	
	Pulc.			34.90			50.6	
	Ad.			34.92			50.7	
5787	Jac.	17	3	46.32	10	12	13.4	P. M. — 0^s.007 — 0″.16 from Lal. and B. Z. c. — o. in decl.: Lal., — 2″.0; B. Z., + 2″.0.
	Q.			46.32			12.1$_1$	
	Smyth			46.58			11.8	
	Main			46.36$_2$			14.3	
	Ad.			46.40			13.0	
5802	Mädl.	17	6	34.25	10	44	17.4	
	Hend.			. .			18.2	
	Arm.			34.40$_2$			18.0$_1$	
	Ay. 60			34.26			18.1	
	Ad.			34.29			18.1	
5821	St.	17	8	56.89	14	32	4.2	
	Yarn.			56.88			3.8	
	R. C.$_2$			56.79			[6.0]	
	Ay. 64			56.89			3.9	
	Main 65			56.85			4.7	
	Gyldén			. .			3.6	
	Wn. 77			.			4.2	
	Leiden			. .			3.7	
	Ay. 70			56.88			3.6	
	Main 70			56.86			3.7	
	Ad.			56.87			4.0	

No.	Authority.	Right ascension.	Declination.	Remarks.
		h. *m.* *s.*	° ′ ″	
5841	Mädl. - - - - -	17 12 44.37	11 0 5.8	
	Ay. 40 - - - - -	. .	6.3_{14}	
	Arm. - - - - - - -	44.19_1	6.9	
	Q. - - - - - - -	44.30_2	4.1_2	
	Yarn. - -	44.26_2	5.1	
	Ad. - - - - - -	44.32	5.8	
5856	Tayl. - -	17 14 48.44_2	18 11 15.9_2	Pi. gives 16″.0, Lal. gives 18″.0 (1 obs.). I have assumed no P. M.
	Kbg. - - - -	48.30_1	15.5_1	
	Main - -	48.31	15.4	
	Ad. - - - -	48.35	15.6	
5939	Mädl. - - - - - -	17 28 36.92	13 14 53.3	
	Arm. - - - - - -	36.65	55.1	
	Q. - - -	36.50_2	52.9_1	
	Ay. 64 - -	36.62	53.0	
	Main - - - -	36.48	56.0	
	Wn. 67 - - - - -	36.61_1	55.2_1	
	Ad. - - - -	36.57	54.5	
5941	St. - - - - -	17 29 7.92	12 39 10.2	
	Yarn. - -	7.90	10.0	
	R. C.$_2$ - -	7.85	10.4	
	Ay. 64 - - - -	7.93	9.9	
	Main 65 - - - -	7.93	10.3	
	Gyldén - - - - -		9.3	
	Wn. 67 - - -	. .	9.9	
	Ay. 70 - - - -	7.93	10.1	
	Main 70 - - - - -	7.93	9.6	
	Leiden - -	. .	9.8	
	Ad. - -	7.92	9.9	
5942	Arm. - -	17 29 16.97_1	13 13 19.1	Lal. gives 22″.7 (1 obs.), Pi. gives 18″.5, Tayl. gives 16″.8 (3 obs.). I have assumed P. M. = 0.
	Q. - - - - - -	16.71_1	19.6_1	
	Wn. 67 - - - - -	16.67_2	20.7	
	Main - - - - -	16.72	18.7	
	Ad. - - - - -	16.75	19.5	
5991	Tayl. - -	17 36 22.17	16 0 43.4_1	The P. M. used + 0″.12 gives c. — o. for Pi. + 0″.7.
	Arm. - - -	22.08	44.1	
	Rümk - - - -	22.09	44.2	
	Ay. 45 - -	22.01	42.4	
	Kbg. - - - -	22.13_1	41.5_1	
	Q. - - - - -	21.88_1	41.3_1	
	Ay. 73 - - -	22.09_1	42.6_2	
	Ad. - - - - -	22.06	42.8	
6030	Tayl.	17 43 22.24	19 17 48.8	Employing P. M. + 0″.04 we find c. — o. D'Ag. + 1″.3 (3 obs.); Lal. — 1″.5 (2 obs.); Pi. + 0″.4.
	Arm. -	21.95	49.0	
	R. C.$_2$ - - -	22.12	48.3	
	Kbg.	22.37_2	49.1_2	
	Ay. 73 - - - -	22.12	48.3	
	Ad. - - - -	22.13	48.5	
6094	Mädl. - - -	17 54 [29.94]	16 45 38.0	Mädler's P. M. in A. R. has been omitted. His decl. is manifestly in error.
	Arm. - - - -	29.56	35.3	
	Yarn. - - - - - -	29.57_2	33.2	
	Ay. 60 - - - - -	29.59	34.1	
	Kbg. - - - - - - -	29.33_1	33.9_1	
	Q. - - - - -	29.50_2	35.2_2	
	Ad. - - - - -	29.51	34.3	
6245	Arm. - - - -	18 17 17.42	17 45 56.9_2	Pulc. 1841 gives 54″.6; there is probably some P. M. in A. R.
	Jac. - - - -	[17.27]	55.7	
	Smyth - - - -	. .	53.2	
	Q. - -	17.45_2	54.0_2	
	Ay. 72 - - - -	17.60_1	54.5_1	
	Ad. - - - - - -	17.47	54.8	
6397	Mädl. - - -	18 41 [29.38]	18 2 39.0	P. M. in A. R. used + 0^s.005. Mädl. rejected.
	Arm. - - -	29.95	39.1_2	
	R. C.$_2$ - - -	30.01	36.4	
	Kbg. - - - -	29.84_1	38.5_1	
	Ay. 64, 71 - - - - -	30.02	38.3	
	Q. - - - - - -	29.94_2	38.0_2	
	Ad. - - -	29.97	37.9	

No.	Authority.	Right ascension.	Declination.	Remarks.
		h. m. s.	° ′ ″	
6482	Mädl.	18 53 2.56	13 44 25.2	
	Arm.	2.48	24.2	
	Yarn.	2.73	24.6	
	Kbg.	2.72_1	22.9_1	
	Q.	2.57_2	24.1_1	
	Schj.	2.59_2	24.6_2	
	Main	2.73	24.6	
	Ay. 64	2.58	23.7	
	Ad.	2.62	24.2	
6483	Mädl.	18 53 20.39	13 27 28.6	
	Arm.	20.48	26.2	
	Kbg.	20.52_2	$[30.2_2]$	
	Q.	20.35_2	27.6	
	Ay. 64	20.42	27.1	
	Main	20.41	26.9	
	Ad.	20.43	27.0	
6487	St.	18 53 56.95	14 53 59.9	
	Arm.	57.04	59.6	
	R. $C._2$	56.88	59.8	
	Yarn.	56.95	61.4_2	
	Ay. 64	56.92	60.3	
	Main 65	56.90	60.6	
	Main 70	56.90	60.3	
	Ay. 70	56.92	60.5	
	Ad.	56.93	60.2	
6527	Q.	18 59 23.95_1	18 57 25.1_2	Airy 1872 is 3^s in error in A. R.; Bessel 1815 has been wrongly reduced. I get 2″.9 more in decl., and have assumed P. M. in decl. + 0″.02, which gives c. — o. — 1″.1 for Bradley (Auwers) and + 0″.6 for Bessel.
	Smyth	24.05_2	25.5	
	Main	23.93	26.6	
	Ay. 72	24.01	25.2	
	Wn. 72	24.03	25.6	
	Ad.	24.00	25.6	
6528	St.	18 59 39.83	13 40 45.0	Obs. since R. $C._2$ very numerous.
	Yarn.	39.81	44.7	
	Arm.	39.78	44.9	
	Kbg.	39.77	44.0	
	R. $C._2$	39.74	44.0	
	Ay. 64	39.84	45.9	
	Arg.	39.92	45.1	
	Eng.	39.90	45.0	
	Main 65	39.82	45.3	
	Main 70	39.86	45.1	
	Wu. 67		45.7	
	Leiden		45.0	
	Ay. 70	39.87	45.2	
	Ad.	39.83	45.0	
6543	Mädl.	19 1 5.59	10 52 49.6	
	Arm.	5.44	47.8	
	Ay. 64	5.51	49.6	
	Main	5.58	49.5	
	Ad.	5.53	49.5	
6595	St.	19 11 56.95	11 22 17.6	
	Yarn.	56.90	17.8	
	R. $C._2$	56.88	17.9	
	Main 65	56.88	17.7	
	Eng.	57.02	17.3	
	Main 70	56.95	18.2	
	Ay. 70	56.93	17.5	
	Pulc.	56.91	17.3	
	Ad.	56.93	17.7	
6615	Mädl.	19 13 [49.18]	12 8 42.8	
	Hend.		43.9_2	
	Kbg.	49.30_2	45.0_2	
	Ay. 72–74	49.37	43.4	
	Ad.	49.36	44.0	

No.	Authority.	Right ascension.			Declination.			Remarks.
		h.	*m.*	*s.*	°	′	″	
6617	Mädl.	19	14	0.12	11	18	17.1	
	Ay. 40			. .			16.9	
	Arm.			0.36			17.2	
	Q.			0.22_{13}			16.2_{10}	
	Smyth			0.29			18.3	
	Ad.			0.25			17.1	
6642	Mädl.	19	18	45.26	16	41	46.2	
	Hend.						45.3	
	Ay. 40			. .			45.9	
	Yarn.			45.21			44.0_8	
	Q.			45.32_2			44.6_2	
	Ad.			45.26			44.9	
6644	Mädl.	19	19	0.72	11	40	44.4	
	Arm.			0.58			44.1	
	Q.			0.51			42.9	
	R. C_2			0.52			41.7	
	Ay. 60			0.54			43.3	
	Smyth			0.60			43.0	
	Ay. 72			0.57			42.3	
	Ad.			0.57			42.9	
6647	Mädl.	19	19	8.20	16	42	51.0	
	Hend.			. .			50.3	
	Ay. 40			. .			51.0	
	Arm.			8.34			50.8	
	Yarn.			8.22			49.4	
	Q.			8.15			49.8_2	
	Ad.			8.23			50.3	
6654	Mädl.	19	19	59.35	19	33	19.5	
	Ay. 45			. .			17.5	
	Arm.			59.31			19.2	
	Yarn.			59.33_2			17.1	
	Kbg.			59.39_2			17.4	
	Q.			59.42_1			17.9_1	
	Ad.			59.35			17.8	
6661	Mädl.	19	20	45.59	18	51	5.5	
	Arm.			45.78			5.1	
	Ay. 64			45.79			3.4	
	Main			45.75			3.1	
	Ad.			45.77			3.9	
6663	Mädl.	19	21	0.37	19	38	[34.0]	Bradley has but 1 obs.; the P. M. used represents this to about +0″.8 (c.—o.), and Pi. to — 0″.3.
	Arm.			0.50			39.6	
	Q.			0.41_2			38.1_2	
	Ay. 64			0.54			40.0	
	Yarn.			0.32_1			39.6	
	Main			0.51			40.2	
	Ad.			0.45			39.6	
6709	Mädl.	19	29	5.43	19	30	9.2	
	Arm.			5.52			7.7	
	Yarn.			5.41			5.7	
	Ay. 64			5.47			6.5	
	Main			5.48			6.2	
	Ay. 72			5.54			7.0	
	Ad.			5.48			6.6	
6724	Mädl.	19	31	37.86	16	11	0.6	
	Arm.			37.74			1.1	
	Kbg.			37.96_2			0.4_2	
	Ay. 64, 73			37.79			0.4	
	Yarn.			37.79_2			0.8_2	
	Ad.			37.82			0.7	
6739	Mädl.	19	34	30.53	17	43	41.2	
	Ay. 50			30.58			41.6_9	
	Kbg.			30.52_2			41.9_2	
	Yarn.			30.53_2			40.8	
	Ay. 73			30.54_2			39.6_2	
	Ad.			30.54			41.0	

No.	Authority.	Right ascension.	Declination.	Remarks.
		h. *m.* *s.*	° ′ ″	
6744	Mädl.	19 35 26.11	17 11 17.8	
	Arm.	25.96	16.8	
	Yaro.	26.04$_2$	15.7	
	Ay. 60	26.09	15.7$_{10}$	
	Q.	25.91$_3$	15.3$_1$	
	Ad.	26.03	15.9	
6747	Mädl.	19 36 20.96	11 54 7.5	
	Arm.	21.00	5.6	
	Ay. 64	20.98	4.0	
	Main	20.95	3.7	
	Ad.	20.97	4.4	
6749	Mädl.	19 36 41.21	11 32 2.8	
	Arm.	41.05	2.6	
	Ay. 50	41.14	2.0	
	Yarn.	41.13	1.6	
	Kbg.	41.04$_1$	3.0$_1$	
	Q.	41.11	1.0$_2$	
	Ad.	41.11	2.0	
6750	Mädl.	19 36 [45.60]	18 10 21.8	
	Arm.	45.23	23.6	
	R. C.$_2$	45.24	18.7$_2$	
	Q.	45.10$_1$	20.7$_2$	
	Ay. 72	45.17	21.2	
	Ad.	45.20	21.3	
6759	Mädl.	19 38 45.28	13 0 15.4	I have corrected an error of 3″ in one of the observations of Ay. 1864, which changes his declination by +0″.75.
	Arm.	45.39	15.9	
	Q.	45.15$_2$	15.0$_1$	
	Kbg.	45.19$_1$	17.1$_1$	
	Ay. 64	45.23	15.8	
	Main	45.30	17.4	
	Ad.	45.27	16.3	
6761	Mädl.	19 38 46.82	12 55 52.4	
	Arm.	46.88	55.2	
	Q.	46.63$_2$	53.8$_1$	
	Ay. 64	46.66	53.4	
	Main	46.70$_2$	53.8$_2$	
	Ad.	46.75	54.1	
6772	St.	19 40 19.01	10 18 36.4	
	R. C.$_2$	18.92	36.3	
	Yarn.	18.98	36.4	
	Ay. 64	18.97	36.5	
	Gyldén	- -	36.4	
	Main 65	18.98	36.5	
	Wn. 70 (67)		36.4	
	Leiden	-	36.5	
	Main 70	18.98	36.6	
	Ay. 70	18.97	36.3	
	Ad.	18.98	36.4	
6783	St.	19 41 48.94	18 13 38.9	
	R. C.$_2$	48.93$_2$	38.6	
	Ad.	48.94	38.8	
6789	Mädl.	19 42 48.55	11 30 23.3	
	Arm.	48.72$_2$	21.6	
	Ay. 60	48.51	22.5	
	R. C.$_2$	48.69$_1$	23.2$_1$	
	Kbg.	48.60$_1$	24.1$_1$	
	Q.	48.51	21.8$_2$	
	Main	48.59	23.7	
	Ay. 72	48.55	22.7	
	Ad.	48.57	22.7	

No.	Authority.	Right ascension.			Declination.			Remarks.
		h.	*m.*	*s.*	°	′	″	
6791	Mädl.	19	43	[0.02]	11	22	26.4	
	Bessel		42	59.69			28.1	
	Arm.			59.74_2			28.1	
	Jac.			[59.41]			28.4	
	Ay. 64			59.56			27.9	
	Main			59.61			29.4	
	Ad.			59.60			28.4	
6794	Mädl.	19	43	25.84	18	49	48.7	
	Arm.			25.84			47.4	
	Yarn.			25.77			47.5	
	R. C.$_2$			[25.52_1]			49.4_2	
	Ay. 60			25.80_1			47.4	
	Main			25.75			47.1	
	Ad.			25.80			47.6	
6805	Mädl.	19	45	2.32	10	6	16.6	
	Arm.			2.28			17.6	
	R. C.$_2$			2.26			15.4	
	Kbg.			2.29_1			16.8_1	
	Q.			2.18_2			14.9_1	
	Ay. 64			2.32			14.7	
	Ad.			2.28			16.0	
6819	Mädl.	19	46	47.37	18	21	10.0	
	Arm.						7.7_2	
	Ay. 64			47.25			6.7	
	Main			47.34			6.1	
	Ad.			47.32			6.7	
6838	Mädl.	19	50	19.14	11	5	37.1	
	Arm.			18.77			37.1	
	Q.			18.88_1			36.1_1	
	Kbg.			19.00_1			38.5_1	
	Ay. 64			19.00			36.3	
	Main			18.92			36.2	
	Ad.			18.95			36.8	
6839	Mädl.	19	50	20.56	16	18	18.8	
	Arm.			20.24			19.5	
	Q.			20.47_2			18.1_1	
	Kbg.			20.57_1			17.1_1	
	Ay. 64			20.56			18.5	
	Main			20.63			19.3	
	Ay. 72			20.68_2			18.8_2	
	Ad.			20.51			18.7	
6853	Mädl.	19	52	4.91	16	27	17.0	
	Arm.			4.97			14.5_1	
	R. C.$_2$			4.88			13.5	
	Ay. 64			4.93			13.8	
	Ad.			4.92			13.8	
6855	Mädl.	19	52	33.28	16	9	31.3	I have corrected a misprint of 20″ in Mädl. Bradley has no decl. I have assumed P. M. in decl. = 0.
	Arm.			33.19			30.9	
	R. C.$_2$			33.17			28.1	
	Ay. 64			32.99			29.9	
	Smyth			33.09			28.9	
	Q.			32.92_2			28.3_1	
	Yarn.			33.05_1			30.5_2	
	Ad.			33.08			29.5	
6858	St.	19	53	11.89	19	9	14.4	
	Arm.			11.81			13.9_2	
	Q.			11.71_2			13.0_2	
	Yarn.			11.81_1			13.9	
	Ad.			11.84			14.0	

No.	Authority.	Right ascension.			Declination.			Remarks.
		h.	m.	s.	°	′	″	
6868	Mädl.	19	54	24.61	17	10	35.6	
	Arm.			24.59			32.9_1	
	Q.			24.53			34.6	
	Kbg.			24.64_1			34.3_1	
	Ay. 64, 68			24.61			34.0	
	Main			24.61			36.3	
	Ad.			24.59			34.8	
6890	Mädl.	19	57	46.82	15	40	56.3	
	Kbg.			46.82_2			55.9_2	
	Ay. 64			46.80			54.2	
	Main			46.82			55.6_2	
	Ay. 72			. .			54.1_2	
	Ad.			46.82			55.2	
6896	Mädl.	19	58	18.75	16	46	1.9_1	Mädler's decl. 14″.6 in error; caused by an error in Taylor.
	Arm.			18.88			18.1	
	Q.			18.79			10.0	
	R. C_2			19.07			15.3	
	Ay. 64			18.88			16.6	
	Ad.			18.90			16.5	
6897	Mädl.	19	58	29.18	16	44	1.1	
	Q.			29.19		43	59.0	
	R. C_2			29.22			57.2	
	Ay. 60			29.25			59.8	
	Ay. 64			29.19_2			59.2_2	
	Ad.			29.21			58.8	
6901	Mädl.	19	59	36.96	19	38	3.7	
	Hend.			. .			3.9	
	R. C_2			36.83			2.7	
	Q.			36.79_2			1.8_1	
	Ay. 64			36.77			3.2_2	
	Ad.			36.84			3.1	
6952	Mädl.	20	8	29.53	14	49	6.3	Right ascension by later observations $29^s.55$.
	Arm.			29.40			7.9	
	Ay. 50			29.23_1			6.3_1	
	Ay. 60			29.47			6.7	
	Q.			29.47_1			3.8_1	
	Yarn.			29.45			4.5	
	Ay. 72			29.53_1			5.5	
	Ad.			29.45			5.9	
7065	Mädl.	20	24	18.89	10	28	43.4	
	Arm.			18.78			44.4	
	Q.			18.77			42.3	
	Main			18.93			43.4	
	Ay. 64			18.80			42.5	
	Main			18.87			43.3	
	Ad.			18.84			43.2	
7079	St., p. m.	20	25	14.40	10	50	27.0	The middle point between the two components. Their difference is about $-1^s.03 + 3''.8$.
	Arm.			14.34			26.5	
	Q.			14.30			26.6	
	R. C_2			14.60			26.7	
	Yarn.			14.36			27.8	
	Ay. 64			14.40_1			26.2_1	
	Main			14.27			26.7	
	Ad.			14.38			26.8	
7088	St.	20	27	14.42	10	52	46.7	Yarn. and Ay. 64 have received double weight in A. R.; Q., Main 65, Main 70, weight $1\frac{1}{2}$ in each co-ordinate; and Ay. 70 the same in A. R., and Wn. 67 in decl.
	Arm.			14.33			46.2	
	Q.			14.35			46.7	
	Yarn.			14.41			47.7	
	Ay. 64			14.41			47.8	
	Main 65			14.44			47.8	
	Main 70			14.41			47.6	
	Wn. 70 (67)			. .			47.3	
	Ay. 70			14.41			46.5	
	Ad.			14.40			47.1	

No.	Authority.	Right ascension.			Declination.			Remarks.
		h.	*m.*	*s.*	°	′	″	
7094	Mädl.	20	28	2.32	12	36	1.7	
	Q.			2.26			0.5_2	
	Ay. 64			2.24			1.4	
	Main			2.17			1.8	
	Yarn.			2.43_1			0.7_2	
	Ay. 72			- -			1.4_2	
	Ad.			2.27			1.3	
7107	Mädl.	20	29	27.78	14	14	40.8	
	Arm.			27.75			41.0_2	
	R. C.$_2$			27.70			40.5	
	Ay. 60			27.76_2			39.4	
	Q.			27.75_2			37.8_2	
	Yarn.			27.76			39.3_2	
	Ad.			27.75			39.9	
7121	St.	20	31	41.18	14	9	41.4	
	Arm.			41.16			42.7	
	Main			41.05			41.0	
	Yarn.			41.20			42.1	
	Ad.			41.16			41.7	
7125	Mädl.	20	31	[50.43]	10	56	34.1	
	Arm.			50.37			33.9	
	Q.			50.20_2			32.8_2	
	Kbg.			50.26_2			34.7_2	
	Ay. 64			40.27			32.3	
	Main			50.37			34.5	
	Ad.			50.30			33.7	
7137	Mädl.	20	32	50.01	12	52	41.4	
	Kbg.			50.00_2			39.9_2	
	Ay. 60			50.00			38.8	
	Ay. 64			49.97_{14}			39.1_{14}	
	Ad.			49.99			39.2	
7146	Mädl.	20	33	[16.67]	15	24	2.4	There is a general confusion in the older declinations; d'Agelet is in error about 5″; P. M. = 0 agrees with Br. to −0″.6 and with Pi. to +1″.4; both c. − o.
	Arm.			17.08			2.7	
	Ay. 50			17.08			1.0	
	Yarn.			17.02			0.6	
	Ay. 60			17.07_{16}			1.8_{15}	
	Kbg.			16.92_2			2.1	
	Main			17.08_2		23	59.3_1	
	Ay. 72			17.08		24	1.3_2	
	Ad.			17.05		24	1.5	
7149	St.	20	33	49.94	15	28	20.6	Weights as usual increased for the later observations where very frequent.
	Yarn.			49.93			20.5	
	Kbg.			49.85			20.3	
	Ay. 64			49.91			20.5	
	Main 65			49.88			20.8	
	Main 70			49.87			20.0	
	Ay. 70			49.91			20.5	
	Ad.			49.90			20.5	
7150	Arm.	20	33	52.31	10	48	22.8	Two obs. of Lalande give decl. 16″.3, from which a P. M. of +0″.08 is inferred. That given by Mädl. in A. R. (+0ˢ.0074) is not confirmed.
	Jac.			52.30			23.2	
	R. C.$_2$			52.45			23.1	
	Q.			52.22			21.4	
	Ay. 64			52.31			24.0	
	Smyth			- -			22.0	
	Ad.			52.32			22.8	
7157	Mädl.	20	34	[45.52]	15	11	50.2	
	Arm.			45.87			60.0	
	Jac.			45.88			59.9	
	R. C.$_2$			45.76_2			57.6_2	
	Q.			45.95_2			58.6_1	
	Smyth			- -			59.1_2	
	Ay. 72			45.94_2			58.8_2	
	Ad.			45.88			59.1	

No.	Authority.	Right ascension.	Declination.	Remarks.
		h. *m.* *s.*	° ′ ″	
7160	Mädl.	20 35 25.15	14 8 22.6	
	Arm.	25.12	23.8	
	Ay. 64	25.04	21.6	
	Main	25.10	22.3	
	Q.	25.07$_2$	20.4$_2$	
	Wn. 73	25.02	21.5	
	Ad.	25.08	22.1	
7173	St.	20 37 37.37	14 37 38.1	The Pulkova declination given as a correction to St.
	Arm.	37.33	40.4	
	Q.	37.35$_2$	37.4$_2$	
	Ay. 71	37.33$_1$	38.4$_1$	
	Pulc.		39.0	
	Ad.	37.35	38.7	
7199	(From 7200) Ad.	20 40 50.75	15 40 31.1	The difference between this and the companion has been assumed according to Struve.
7200	Arg.	20 40 51.61	15 40 31.2	
	R. C.$_2$	51.54	29.8	
	Q.	51.48$_1$	29.0$_1$	
	Yarn.	51.58	30.8$_2$	
	Ay. 69	51.57$_{12}$	30.2$_{12}$	
	Main	51.56$_2$	30.0	
	Leiden		29.9	
	Ad.	51.57	30.3	
7223	Mädl.	20 43 40.12	12 4 45.7	
	Arm.	40.12	44.9	
	R. C.$_2$	40.25	43.2	
	Ay. 60	40.23	44.5	
	Q.	40.24$_3$	42.9$_1$	
	Ad.	40.19	44.0	
7257	Mädl.	20 49 40.89	12 5 29.6	
	Arm.	40.87	30.4	
	Kbg.	40.76$_2$	31.6$_2$	
	Ay. 64	40.64	29.4	
	Main	40.72	29.3	
	Ay. 72	40.66	30.7	
	Ad.	40.76	30.1	
7258	Mädl.	20 49 41.61	13 14 46.2	
	Arm.	41.60	43.3$_2$	
	Kbg.	41.58	46.5	
	Ay. 64	41.57	45.2	
	Main	41.66	44.3	
	Yarn.	41.87$_1$	44.4$_2$	
	Ad.	41.63	44.8	
7271	Mädl.	20 52 24.75	10 21 28.0	
	Arm.	24.77	27.9$_1$	
	Kbg.	24.67	29.0	
	R. C.$_2$	24.54	29.1	
	Ay. 64	24.65	28.2	
	Yarn.	24.76$_2$	29.1$_2$	
	Ad.	24.69	28.6	
7418	St.	21 16 18.35	19 16 14.0	
	R. C$_2$.		13.9	
	Q.	18.28$_2$	13.8	
	Yarn.	18.36	15.2$_2$	
	Main	18.43$_2$	15.0$_2$	
	Wn. 70 (67)		14.4	
	Pulc.	18.30	14.9	
	Ay. 73		13.9$_2$	
	Ad.	18.34	14.3	
7450	Arm.	21 20 38.02$_1$	18 50 7.0	P. M. assumed zero; 1 obs. of Lalande gives decl. 6″.3.
	Jac.	37.93	5.4	
	Yarn.	38.15	5.1$_2$	
	Main	38.27	6.1	
	Smyth	38.07	5.9	
	Ad.	38.10	6.0	

No.	Authority.	Right ascension.	Declination.	Remarks.
		h. *m.* *s.*	° ′ ″	
7520	Mädl.	21 31 [54.72]	18 45 28.0	
	Arm.	54.51	27.9	
	R. C_2.	54.46	24.2	
	Kbg.	54.48	24.0_2	
	Q.	54.51_2	24.3	
	Ay. 64	54.47	25.4	
	Ay. 70	54.48_1	25.5	
	Yarn.	54.68_1	26.5_2	
	Ad.	54.50	25.4	
7528	Arm.	21 33 11.48	19 42 9.3	There is an error of 30″ in Lalande's decl.
	Yarn.	11.48	6.8	
	Smyth	11.55	8.0	
	Main	11.48	8.3	
	Q.	11.42_1	8.0	
	Wn. 72	11.63_2	7.5_2	
	Ad.	11.51	8.0	
7553	Mädl.	21 36 [26.27]	10 15 18.2	P. M. = 0 gives C. — O. in decl.; Bradley (Bessel) — 0″.2 (1 obs.); D'Ag. (2 obs.) +1″.7; Lal. (2 obs.) + 0″.7; Pi. —0″.2.
	Arm.	26.70_1	18.9	
	R. C_2	26.44	19.4	
	Q.	26.37_2	19.0_1	
	Kbg.	26.68_2	17.4_2	
	Ay. 72	26.54	19.8	
	Ad.	26.53	19.0	
7567	Mädl.	21 38 35.62	16 46 41.1	
	Arm.	35.61	39.9_2	
	Q.	35.38_1	39.2_1	
	Ay. 60	35.57_2	39.7_2	
	Ay. 72	35.52_2	39.2_2	
	Ad.	35.56	39.5	
7590	Mädl.	21 41 7.88	16 37 6.8	The assumed P. M. in decl. — 0″.03 represents D'Ag. to — 0″.6 (2 obs.); Lal. to + 0″.6 (1 obs.).
	Arm.	8.11_2	3.0	
	Jac.	7.81	3.0	
	Yarn.	7.97_2	2.7_2	
	R. C_2	8.26	0.6	
	Q.	7.94	2.1_1	
	Ay. 64	7.99	1.8	
	Smyth	8.06	1.7	
	Ad.	8.00	2.1	
7606	Mädl.	21 44 11.90	16 42 21.1	
	Arm.	11.70	19.0	
	Q.	11.80	18.7_1	
	Main	11.98	19.2	
	Ay. 64	11.76	19.0	
	Ay. 72	11.84	18.6	
	Wn. 73	11.79	18.7	
	Ad.	11.82	18.9	
7641	Mädl.	21 50 50.78	11 29 0.8	
	Arm.	50.70	1.5	
	Yarn.	50.77	3.2	
	Kbg.	50.65_2	1.7_2	
	Main	50.77	1.4	
	Ay. 72	50.65	0.7	
	Wn. 73	50.65	0.2	
	Ad.	50.71	1.3	
7664	St.	21 54 60.02	12 31 19.2	
	Ay. 72	59.97	19.0	
	Pulc.	59.98	18.2	
	Ad.	59.99	18.8	
7674	Mädl.	21 57 11.02	10 47 1.3	
	Arm.	10.80_2	2.1	
	Challis	. .	0.6	
	Ay. 64	10.99	1.0	
	Main	11.11	0.2	
	Ad.	10.98	0.9	

No.	Authority.	Right ascension.	Declination.	Remarks.
		h. m. s.	° ′ ″	
7742	Tayl. - - - -	22 5 49.14	15 25 32.4	P. M. in decl. assumed zero; C. — O. D'Ag. — 3″.4 (1 obs.); Lal. — 2″.1 (2 obs.); Pi. + 0″.3 (13 obs.)
	Arm. - - - -	49.22	31.4	
	Q. - -	48.97$_2$	30.5$_1$	
	Main - -	49.16	31.3	
	Ay. 72 - - - -	49.12	31.3	
	Ad. - - -	49.13	31.5	
7796	St. - - - - -	22 15 21.90	11 34 33.6	
	Kbg. - - -	21.94$_2$	33.9$_2$	
	Yarn. - - - - - - -	21.89$_2$	32.6	
	Ay. 72 - - - - -	21.92	34.3	
	Wu. 73 - - -	21.88	34.2	
	Pulc. - - - - - -	21.92	33.8	
	Ad. - - -	21.91	33.7	
7856	Mädl. - - -	22 26 33.14	19 35 10.9	
	Arm. - - -	33.10	11.5	
	Q. - - -	32.98$_2$	10.8$_2$	
	R. C.$_2$ -	33.08	12.1	
	Ay. 64 - - - - -	33.10	10.8	
	Yarn. - -	33.12	12.0$_2$	
	Ay. 72 - - - - - -	33.09	11.4	
	Ad. -	33.09	11.4	
7893	Mädl. - - - - -	22 32 49.62	18 52 34.4	
	Arm. - - - - - -	49.61	34.6	
	Q. - -	49.69$_1$	32.6$_2$	
	Kbg. -	49.57$_2$	34.4$_2$	
	Main - - - -	49.75	33.6	
	Ay. 64 - - - - -	49.68	33.2	
	Ay. 72 - - - - - -	49.69	32.9	
	Ad. - - - - -	49.66	33.6	
7900	Mädl. - -	22 33 43.69	19 1 52.7	
	Arm. - -	43.68	52.3	
	Main - - - -	43.70	51.2	
	Ay. 64 - -	43.72	50.8	
	Ad. -	43.70	51.4	
7908	St. - - - - - -	22 35 13.63	10 10 45.9	Most of the separate values have double weight, or weight 1½.
	Arm. - - -	13.67	46.6	
	R. C.$_2$ - -	13.60	44.9	
	Yarn. - -	13.63	45.8	
	Q. - - - - - -	13.57	45.6	
	Ay. 64 - - - - - -	13.64	45.9	
	Main 65 - - - - -	13.58	46.2	
	Arg. -	13.74	45.6	
	Eng. - - - - - - - -	13.69	46.1	
	Wn. 70 (67) - - - -	.	45.7	
	Leid. - - - - -	. .	45.9	
	Ay. 70 - - - - - -	13.64	46.2	
	Main 70 - - - -	13.60	46.0	
	Ad. - - - - -	13.64	45.9	
7912	Tayl. -	22 35 [46.64]	13 51 52.6$_2$	Lalande gives decl. 50″.8; Pi. gives decl. 50″.9.
	Arm. - - -	47.01	51.3	
	Main - - - - - -	47.15	50.8	
	Ay. 73 - - - - - - - -	47.20$_1$	51.8$_1$	
	Ad. - - - -	47.10	51.5	
7937	Mädl. - - - - -	22 39 23.36	18 42 29.2	
	Arm. - - - - - -	23.38	31.1	
	R. C.$_2$ - -	23.30	30.3	
	Q. - -	23.29	29.0$_2$	
	Ay. 64 - - -	23.34	28.2	
	Wn. 72 -	23.45$_2$	28.4	
	Ad. - - - - - -	23.35	29.4	
7943	Mädl. - - - -	22 40 26.75	11 31 56.6	
	Arm. - - - - - - - -	26.86	56.2	
	Q. - - -	26.86	57.3	
	Ay. 60 - - - - - - -	26.83	57.2	
	R. C.$_2$ - - - - - - - -	26.84	56.2	
	Kbg. - - - - - - - -	27.03$_2$	56.8$_2$	
	Ay. 64 and 71 - - - -	26.84$_2$	56.3$_2$	
	Yarn. - - - - - -	26.83$_2$	57.1$_2$	
	Ad. - - - - - - - - -	26.85	56.7	

No.	Authority.	Right ascension. h.	m.	s.	Declination. °	′	″	Remarks.
7964	C. A.	22	45	11.05	13	18	3.1	P. M. used + 0ˢ.026 + 0″.23; C. A. gives + 0ˢ.020 + 0″.28 as a first approximation from Lalande.
	Jac.			10.99			4.2	
	Main			11.07			1.9	
	Q.			. .			2.3_1	
	Ad.			11.04			3.0	
7975	Tayl.	22	46	53.25	16	10	42.7	The P. M. assumed in decl. is zero, which agrees very closely with Pi, but differs — 5″.0 (C. — O.) from D'Agelet.
	Arm.			53.12			42.0	
	Kbg.			53.14_1			41.8_1	
	Main			53.18			42.5	
	Ay. 73			53.13			42.1	
	Ad.			53.17			42.3	
8003	Mädl.	22	52	56.60	11	3	40.7	If Armagh is rejected the declination would be about 40″.2.
	Arm.			56.64			43.3	
	Yarn.			56.56_2			42.3_2	
	Main			56.76			39.0	
	Ay. 64			56.58			40.5	
	Q.			. .			38.9_1	
	Ad.			56.63			40.9	
8034	St.	22	58	32.12	14	31	59.7	
	R. $C._2$			32.11			58.4	
	Yarn.			32.14			59.4	
	Ay. 64			32.10			59.0	
	Main 65			32.07			58.7	
	Gyldén						58.6	
	Wn. 70 (67)			.			59.4	
	Leid.			. .			58.4	
	Main 70			32.07			58.9	
	Ay. 70			32.10			59.6	
	Ad.			32.07			59.0	
8147	Mädl.	23	16	32.62	19	52	28.6	The proper motion in declination seems to be very exactly zero.
	Arm.			[32.81]			28.1	
	Jac.			32.42			26.5	
	R. $C._2$			32.52			25.9	
	Ay. 64			32.43			26.5	
	Smyth			32.56			26.7	
	Main			32.50			28.3	
	Ad.			32.51			27.0	
8149	Mädl.	23	16	46.32	11	37	44.9	
	Arm.			46.26			43.7	
	Ay. 64			46.26			44.4	
	Main			46.33			44.5	
	Ay. 71			46.29			44.3	
	Ad.			46.29			44.2	
8182	St.	23	22	50.01	12	4	15.6	
	Ay. 72			50.04			16.1	
	Wn. 73			50.01			16.6	
	Pulc.			50.03			15.9	
	Ad.			50.02			16.0	
8222	Mädl.	23	31	19.84	16	8	1.2	
	Arm.			19.82			2.2	
	R. $C._2$			19.87			1.1	
	Ay. 64			19.90			1.3	
	Ad.			19.86			1.5	
8227	Mädl.	23	31	38.15	17	42	30.9	
	Arm.			38.24			29.6	
	Kbg.			38.10_1			29.5_1	
	Q.			38.18_2			28.6_1	
	Ay. 64			38.16			28.8	
	Main			38.27			29.5	
	Ay. 72			38.19_3			29.2	
	Ad.			38.19			29.2	

No.	Authority.	Right ascension.	Declination.	Remarks.
		h. *m.* *s.*	° ′ ″	
8247	Mädl.	23 36 11.91	17 58 30.6	Proper motion assumed zero. Mädler's decl. is derived from one obs. of Lalande, without P. M. or S. C.; with the latter it becomes 27″.9.
	Arm.	12.00	28.6	
	Jac.	11.70	27.2	
	Yarn.	11.92_2	27.6	
	Q.	11.95_1	26.6_1	
	Main	12.04	27.0	
	Ay. 64	12.01	27.2	
	Smyth	12.07	28.3	
	Ad.	11.96	27.6	
8248	Mädl.	23 36 23.23	15 38 32.8	
	Arm.	23.25	31.7	
	Q.	23.14	31.0_2	
	Main	23.17	31.9	
	Ay. 64	23.15	31.2	
	Ay. 72	23.21	30.9	
	Ad.	23.19	31.4	
8299	St.	23 46 7.83	18 25 34.3	
	Ay. 71	7.76_1	35.5_1	
	Main	7.75	34.3	
	Wn. 73	7.76	34.0	
	Pulc.	7.83	34.1	
	Ad.	7.80	34.3	
8300	Mädl.	23 46 14.70	10 15 7.8	
	Hend.	. .	8.0	
	Ay. 64	14.63	6.5	
	Main	14.55	7.5	
	Ad.	14.63	7.3	
8335	Tayl.	23 53 24.01	10 34 37.8	Pi. gives decl. 36″.6; D'Ag. gives 37″.9 (1 obs.). A slight P. M. in decl. is possible, but needs new observations to confirm it.
	Main	24.01	37.5	
	Q.	24.03_1	38.0_1	
	Wn. 73	23.97	39.4	
	Ad.	24.00	38.2	
8370	Mädl.	23 59 17.04	12 42 2.9	
	Arm.	16.97_1	2.0	
	Yarn.	16.97_2	1.7	
	Q.	16.96_2	1.5_1	
	Main	16.92	1.6	
	Ay. 64, 72	16.95	1.8	
	Wn. 73	16.95	2.0	
	Ad.	16.97	2.0	
8	Mädl.	0 2 35.74	17 30 58.6	
	Hend.	. .	31 2.0	
	Arm.	35.66	31 0.8_2	
	R. C_2.	35.71	1.3	
	Q.	35.61_1	1.3_2	
	Ay. 64	35.63	1.3	
	Ad.	35.66	1.4	
14	Mädl.	0 3 36.71	10 26 59.6	
	Hend.	. .	27 0.1	
	Arm.	36.87_1	27 2.2	
	Ay. 40		28 0.6	
	Q.	. .	27 0.6_1	
	Schj.	36.82_1	26 59.8_1	
	Ad.	36.78	27 0.8	
26	St.	0 6 48.02	14 29 18.3	
	Y.	48.03	18.7	
	R. C_2	48.00	[21.2]	
	Ay. 64		. .	
	Gyldén	. .	18.2	
	Main 65	47.95	19.3	
	Main 70	48.01	19.0	
	Ay. 70	48.00	19.0	
	Wn. 70		19.0	
	Leiden	. .	19.3	
	Ad.	48.01	18.7	

No.	Authority.	Right ascension.			Declination.			Remarks.
		h.	*m.*	*s.*	°	′	″	
32	Mädl.	0	8	8.28	19	30	44.0	
	Arm.			8.14			41.7	
	Ay. 64			8.43			41.2	
	Main			8.27			41.2	
	Leiden			8.18			41.3	
	Ay. 70			- -			41.4	
	Ad.			8.26			41.4	
48	Mädl.	0	10	18.85	13	13	18.6	
	Arm.			18.77			18.1	
	Ay. 64			18.75			19.1	
	Smyth			18.87			19.1	
	Main			18.69			19.8	
	Wn. 73			18.83			19.0	
	Ad.			18.79			19.0	
55	Mädl.	0	11	20.91	15	38	15.4	
	Arm.			20.84_2			15.5	
	R. C_2			21.02_2			12.0	
	Ay. 64			20.75			13.8	
	Main			20.75_1			14.8_1	
	Ad.			20.86			13.9	
63	Mädl.	0	13	28.63	15	33	26.1	
	Arm.			28.77			24.1	
	Ay. 64			28.67			25.0	
	Main			28.91_2			25.8	
	Ay. 72			28.88_2			25.8	
	Ad.			28.76			25.2	
73	Mädl.	0	15	57.43	12	47	16.3	
	Arm.			57.56			18.1	
	Q.			57.51_2			17.0_2	
	R. C_2			57.59			18.2	
	Schj.			57.38			17.7	
	Ay. 64			57.46			17.3	
	Ad.			57.49			17.7	
82	Mädl.	0	18	9.91	13	37	21.1	
	Arm.			9.93			21.3	
	Ay. 64			9.97			20.9	
	Main			9.91			22.0	
	Ay. 72			9.96			20.8	
	Ad.			9.94			21.2	
91	Mädl.	0	19	33.67	19	27	13.3	
	Arm.			33.77			15.2	
	Yarn.			33.59_2			14.6	
	Q.			33.60_2			13.7	
	Ay. 64			33.59			14.9	
	Main			33.71_2			14.4_2	
	Ad.			33.66			14.6	
98	Mädl.	0	21	0.94	15	19	57.5	
	Arm.			1.15			59.4	
	Jac.			0.98			58.1	
	R. C_2			1.19			57.2	
	Ay. 64			1.17			58.6	
	Smyth			1.29			59.1	
	Ad.			1.11			58.5	
99	Mädl.	0	21	28.10	18	49	22.6	
	Arm.			28.18			21.0	
	Ay. 64			28.24			21.7	
	Main			28.09			21.6	
	Ad.			28.15			21.4	
101	Mädl.	0	21	32.09	17	12	4.2	
	Arm.			32.03			[7.5]	
	R. C_2			32.07_2			0.5	
	Q.			32.03			1.8	
	Ay. 64			32.05			1.5	
	Ad.			32.05			1.3	

No.	Authority.	Right ascension.	Declination.	Remarks.
		h. *m.* *s.*	° ′ ″	
102	Mädl.	0 21 43.12	15 45 14.3	
	Arm.	43.00	15.6	
	Ay. 64	43.08	13.0	
	Main	43.00	14.5	
	Yarn.	43.03$_2$	14.3	
	Wn. 73	43.10	14.0	
	Ad.	43.06	14.3	
116	Mädl.	0 24 17.50	15 20 49.0	
	Arm.	17.63	48.7	
	Ay. 64	17.54	49.2	
	Main 65	17.66	46.5	
	Yarn.	17.62$_2$	50.0	
	Main 70	17.60	48.1	
	Wn. 73	17.59	48.3	
	Ad.	17.61	48.5	
122	Mädl.	0 25 6.15	15 19 56.6	
	Arm.	6.15	54.7	
	Ay. 64	6.16	54.0	
	Main	6.26$_1$	53.9	
	Yarn.	6.25$_2$	54.9	
	Wn. 73	6.15	54.0	
	Ad.	6.18	54.3	
130	Mädl.	0 26 2.60	19 36 21.7	
	Arm.	2.30	20.7	
	Yarn.	2.33$_2$	19.7	
	R. C$_2$	2.56	21.3	
	Ay. 64	2.38	20.5	
	Ay. 72	2.39	20.2	
	Ad.	2.43	20.5	
133	Mädl.	0 27 6.83	19 44 39.0	I have used Mädler's P. M. in decl. +0″.038. Bessel (Königsberg) and Anwers do not well agree in declination.
	Arm.	7.34$_1$	40.4	
	Yarn.	7.22$_2$	37.9	
	Smyth	7.36	38.3	
	Ay. 73	7.28	38.0	
	Ad.	7.30	38.6	
142	Arm.	0 28 26.74	12 41 2.1	A. R. uncertain. Piazzi reduced to 1875.0 gives decl. = 12° 11′ 2″.1. I have assumed P. M. = 0.
	Main	26.57	1.7	
	Schj.	26.20$_1$	2.2$_1$	
	Kbg.	26.46$_1$	3.7$_1$	
	Ad.	26.66	2.2	
149	Jac.	0 29 26.18$_2$	12 31 27.8	P. M. adopted —0.^{s}012, —0″.20.
	Arm.	26.29	26.2$_2$	
	Yarn.	26.30	27.4$_2$	
	R. C$_2$	26.36	28.5$_1$	
	Ay. 60	26.33	27.4	
	Q.	26.31$_2$	25.9$_2$	
	Smyth	26.36	27.1	
	Ay. 64	26.34$_1$	27.1$_1$	
	Ad.	26.30	27.1	
156	Mädl.	0 30 16.72	14 32 38.5	
	Arm.	16.50	38.4	
	Ay. 45	16.62	37.6	
	Q.	16.64$_2$	36.4$_1$	
	Ay. 72	16.67	36.1	
	Ad.	16.63	37.3	
211	Mädl.	0 40 0.57	14 47 37.4	
	Arm.	0.59$_2$	36.2	
	Ay. 64	0.59	35.8	
	Main	0.55	34.8	
	Wn. 73	0.49	36.3	
	Ad.	0.56	35.8	

No.	Authority.	Right ascension.	Declination.	Remarks.
		h. m. s.	° ′ ″	
213	Mädl.	0 40 30.14	11 17 29.9	
	Arm.	30.32$_2$	28.3$_1$	
	Kbg.	30.26$_1$	29.6$_1$	
	R. C.$_2$	30.24$_2$	32.6$_1$	
	Ay. 60	30.27	30.2	
	Yarn.	30.25$_2$	31.9$_1$	
	Ad.	30.24	30.3	
214	Mädl.	0 40 37.41	18 53 43.4	
	Arm.	37.18$_2$	44.2$_1$	
	Ay. 64	37.44	42.1	
	Main	37.42	42.5	
	Ay. 71	37.41	42.5	
	Ad.	37.39	42.6	
223	Mädl.	0 42 24.51	16 15 56.7	
	Arm.	24.56$_2$	56.1	
	R. C.$_2$	24.68	54.2	
	Ay. 64	24.65	55.3	
	Ad.	24.60	55.2	
247	Mädl.	0 47 58.02	18 30 37.5	Mädl. and Arm. omitted for A. R. The P. M. in A. R. is uncertain.
	Arm.	58.16	37.3	
	Q.	58.21$_2$	35.4	
	Ay. 64	58.20	36.9	
	Main	58.26	36.8	
	Ay. 72	58.26	35.7	
	Wn. 73	58.31	36.7	
	Ad.	58.25	36.5	
258	Hend.	0 49 35.83	13 16 29.3	P. M. in declination omitted; it may be $+0''.03$.
	Arm.	35.71	29.8	
	Kbg.	35.83$_2$	27.7$_2$	
	Main	35.56$_2$	28.1	
	Ad.	35.74	28.8	
269	Hend.	0 51 21.10	13 1 11.5	There may be a P.M. in decl. of $+0''.04$; it has not been used.
	Arm.	21.10	12.1	
	Schj.	21.00$_2$	12.3$_2$	
	Main	21.25	11.8	
	Yarn.	21.12	11.2$_2$	
	Ad.	21.10	11.8	
305	Mädl.	0 58 29.46	14 16 20.1	
	Arm.	[29.27]	23.5$_2$	
	Ay. 64	29.50	23.8	
	Main	29.51	22.2	
	Ay. 72	29.53	23.6	
	Ad.	29.50	23.3	
316	Mädl.	0 59 59.20	12 17 7.3	
	Arm.	[58.99]	6.8	
	Ay. 61	59.12	7.0	
	Main	59.09	7.6	
	Ad.	59.14	7.2	
322	Mädl.	1 1 14.96	20 4 27.5	
	Arm.	15.00	26.0	
	Ay. 64	14.95	26.0	
	Yarn.	15.00	24.1$_2$	
	Ad.	14.98	25.5	
336	Mädl.	1 3 8.40	18 59 27.8	
	Arm.	8.32$_2$	28.3$_1$	
	Q.		26.9$_2$	
	Main	8.37	28.5	
	Ad.	8.37	27.8	
341	Arm.	1 3 [33.69]	15 0 30.7$_2$	A P. M. in A. R. of perhaps $+0^s.010$ is probable; it has not been used. Piazzi gives decl. 15° 0′ 30″.0 for 1875.0.
	R. C.$_2$	33.79$_2$	28.6	
	Ay. 60	33.83	29.7$_8$	
	Yarn.	33.97$_2$	28.9$_2$	
	Ad.	33.86	29.5	

No.	Authority.	Right ascension.	Declination.	Remarks.
		h. m. s.	° ′ ″	
370	Mädl.	1 7 29.22	15 28 17.2	
	Arm.	29.04$_2$	16.0	
	Ay. 64	29.22	16.2	
	Main	29.25	16.9	
	Ad.	29.19	16.4	
413	Mädl.	1 17 7.94	17 9 58.2	
	Arm.	7.99$_1$	58.3	
	Ay. 64	7.91	58.5	
	Main	7.97	58.6	
	Ad.	7.94	58.5	
427	Mädl.	1 19 30.95	18 31 17.1	This position Ay. 68 is derived from that given in Ay. 64, combined with an observation made in 1871.
	Arm.	30.99	14.2$_2$	
	Ay. 60	31.04$_9$	16.0$_9$	
	Q.	31.06	17.4$_2$	
	Yarn.	31.05	16.4$_2$	
	Main	31.17	16.6	
	Ay. 68	31.09	15.6$_2$	
	Ad.	31.05	16.2	
430	Mädl.	1 19 37.68	19 25 17.6	
	Arm.	37.62	17.1	
	Kbg.	37.70$_1$	15.9$_1$	
	Main	37.73	16.3	
	Ad.	37.68	16.8	
431	Mädl.	1 19 56.66	18 35 32.7	
	Arm.	56.59	31.2$_2$	
	Ay. 60	56.70	32.0	
	Q.	56.71$_1$	30.8$_2$	
	Yarn.	56.73$_2$	32.7	
	Ay. 71	56.70$_1$	30.7$_1$	
	Wn. 72	56.78	30.9	
	Ad.	56.69	31.4	
439	Hend.	1 21 40.89	16 25 56.5	I have used a P. M. in A. R. of +0^s.008. The data in declination are discordant. Piazzi gives 55″.7 without P. M. The star needs reobservation.
	Arm.	40.82$_2$	54.2	
	Yarn.	40.99	54.1$_1$	
	Main	40.99	52.8	
	Ad.	40.93	54.4	
446	Mädl.	1 23 8.12	17 42 34.0	The Armagh A. R. omitted; one observation only made in 1832. Bradley has no declination.
	Arm.		32.1$_2$	
	Ay. 64	8.11	31.8	
	Main	8.10	30.0	
	Ad.	8.11	31.2	
453	St.	1 24 47.74	14 42 2.0	
	Y.	47.74	2.9	
	Ay. 64	47.75	2.8	
	Main 65	47.71	2.6	
	Main 70	47.77	2.6	
	Ay. 70	47.74	2.8	
	Wn. 70			
	Ad.	47.74	2.8	
454	R. C$_2$.	1 25 6.15$_2$	10 14 38.2	
	Yarn.	6.29$_2$	37.6$_2$	
	Ad.	6.27	37.9	
455	P. M.	1 25 19.18	16 18 33.2	Mädler's P. M. has been used; it seems nearly correct.
	Jac.	19.03	30.8	
	Sabler	19.11$_2$	32.2$_2$	
	Arm.	19.09$_2$	32.3	
	Ay. 64	19.05	33.6	
	Smyth	19.03$_1$	32.6	
	Main	19.06	34.4	
	Ad.	19.08	32.8	
459	Arm.	1 25 55.66$_1$	11 14 19.0$_2$	Lalande's decl. for 1875.0 is 11° 14′ 17″.5 from two obs., which differ 3″.7. I have assumed no P. M.
	Smyth		19.8$_2$	
	Main	55.61$_2$	21.2$_2$	
	Ad.	55.63	20.0	

No.	Authority.	Right ascension.			Declination.			Remarks.
		h.	*m.*	*s.*	°	′	″	
469	Arg. 17–250	1	28	3.72	17	49	16.6	Argelander's P. M. has been used.
	R. C.$_2$			3.53			15.7	
	Yarn.			3.59$_2$			18.0$_2$	
	Ay. 72			3.36			17.6	
	Ad.			3.55			16.9	
470	Mädl.	1	28	13.11	11	55	5.6	
	Arm.			13.15			5.2$_2$	
	Ay. 64			13.20			4.4	
	Main			13.17			4.1	
	Ad.			13.16			4.8	
476	Mädl.	1	29	5.61	14	1	19.0	The position Ay. is combined from both catalogues, 1860 and 1864. There is but one obs. in the latter.
	Arm.			[5.36]			18.3$_2$	
	Kbg.			5.69			17.3	
	Ay.			5.51$_8$			18.1$_8$	
	Yarn.			5.48			17.1$_2$	
	Wn. 72			5.54			17.7	
	Ad.			5.56			17.7	
477	Hend.	1	29	8.70	16	47	34.6	
	Q.			8.91$_2$			34.0	
	R. C.$_2$			8.88			33.1	
	Ay. 60			8.92			35.7	
	Ay. 64			8.96$_2$			34.9$_2$	
	Yarn.			8.82			35.8$_2$	
	Ad.			8.86			34.6	
488	Mädl.	1	30	28.37	11	30	6.3	
	Q.			28.31			4.6$_3$	
	R. C.$_2$			28.35			5.0	
	Yarn.			28.40$_{15}$			5.4	
	Ay. 60			28.38$_{12}$			5.5$_{12}$	
	Ay. 64			28.41			5.6	
	Main			28.35			4.6$_2$	
	Wn. 72			28.43			5.5	
	Ad.			28.38			5.3	
490	Mädl.	1	31	1.87	11	26	23.6	Bradley (Auwers) has no declination. I have adopted Mädler's P. M. Airy's place is combined; one observation in the catalogue for 1860, and three in that for 1864.
	Arm.			1.87			25.8$_2$	
	Q.			1.78$_2$			23.8	
	R. C.$_2$			1.80			23.8$_2$	
	Ay.			1.75			23.6	
	Ad.			1.82			24.0	
495	Mädl.	1	32	31.11	15	59	25.3	
	Arm.			31.16$_1$			24.5	
	Yarn.			31.18$_2$			25.8	
	Ad.			31.14			25.2	
496	Mädl.	1	32	33.58	13	39	3.3	
	Q.			33.76$_1$			2.0$_2$	
	Kbg.			33.71$_2$			4.4$_2$	
	Ay. 64			33.67			1.5	
	Main			33.72$_2$			2.4$_2$	
	Ad.			33.66			2.4	
500	Mädl.	1	32	56.16	15	46	15.2	
	Ay. 60			56.27$_8$			14.9$_8$	
	Ay. 64			56.24$_2$			15.1$_2$	
	Main			56.24			14.3	
	Yarn.			56.21$_2$			16.0$_2$	
	Ay. 72			56.28			14.9	
	Ad.			56.23			15.0	
523	Mädl.	1	35	42.84	19	39	36.2	
	Arm.			42.81			[41.1]	
	R. C.$_2$			42.70$_2$			36.5	
	Ay. 60			42.84			36.2	
	Yarn.			42.80$_2$			35.4$_2$	
	Ad.			42.80			36.1	

No.	Authority.	Right ascension.	Declination.	Remarks.
		h. *m.* *s.*	° ′ ″	
524	Jac.	1 35 [42.84]	15 8 48.6	Lalande (2 obs.) gives for 1875.0 A. R. $1^h\ 35^m\ 42^s.98$; decl. 15° 8′ 48″.1.
	Yarn.	43.03$_2$	46.9$_2$	
	Smyth	. .	48.2$_2$	
	Main	43.18$_3$	48.7$_3$	
	Q.	43.01$_1$	48.0$_2$	
	Ad.	43.08	48.1	
533	Mädl.	1 38 6.16	19 27 30.5	
	Arm.	6.15	28.8	
	Ay. 60	6.26	29.9	
	Main	6.26	30.3	
	Yarn.	6.24$_2$	29.2$_2$	
	Ad.	6.21	29.6	
538	Mädl.	1 39 48.09	16 47 8.6	Mädler included in declination.
	Arm.	48.12	9.2	
	Smyth	[48.35]	9.6	
	Ad.	48.11	9.1	
542	Ay. 50	1 40 31.27	10 13 8.2	Pi. gives 7″.4 in decl. for 1875.0.
	Yarn.	31.30$_3$	7.4$_3$	
	Ad.	31.28	7.9	
546	Mädl.	1 41 24.33	16 19 57.7	I have transferred to this star Yarnall's A. R. of the following.
	Arm.	[24.55]	57.1	
	Ay. 64	24.21	56.4	
	Q.	24.22$_2$	55.8$_2$	
	Main	24.33	55.8	
	Yarn.	24.20	57.8$_2$	
	Ad.	24.26	56.6	
549	Mädl.	1 41 34.72	16 23 49.0	Bradley has no declination. The P. M. used in that element is Mädler's, which agrees well with Piazzi. His declination for 1875.0 becomes 16° 23′ 47″.9 if brought up by it.
	Arm.	34.73	50.0	
	Yarn.	. .	48.7	
	Q.	34.55$_2$	46.9$_2$	
	Ay. 64	34.58$_2$	47.8$_2$	
	Main	34.68	47.1	
	Ad.	34.66	48.2	
561	Mädl.	1 44 14.02	10 25 23.6	
	Arm.	13.93	24.6	
	Yarn.	14.13	25.2	
	Ay. 60	14.05	24.6	
	Kbg.	14.08	23.8	
	Q.	13.96$_1$	24.4$_2$	
	Ad.	14.03	24.5	
572–3	St.	1 46 40.37	18 40 53.0	I have reduced St. both by systematic correction (+0″.4), and to the middle point between the two stars. For either star add ±4″.3 to the declination.
	Arm.	40.51$_1$	53.3	
	R. C.$_2$	40.38	51.9	
	Yarn.	40.36	53.2$_2$	
	Main	40.34	50.9	
	Ad.	40.36	52.5	
592	Mädl.	1 50 31.43	17 12 23.4	
	Q.	31.41$_{10}$	23.6	
	Yarn.	31.40$_9$	23.4	
	Ay. 60	31.41	23.1	
	Ay. 64	31.42$_8$	22.8	
	Ay. 72	31.43	22.5	
	Ad.	31.42	23.1	
609	Hend.	1 52 44.56	11 41 14.3	P. M. in declination used — 0″.05, from Piazzi.
	Yarn.	44.54$_2$	14.2$_2$	
	Main	44.40	14.7	
	Ay. 70	44.44	15.0	
	Ad.	44.48	14.3	

No.	Authority.	Right ascension.	Declination.	Remarks.
		h. *m.* *s.*	° ′ ″	
629	Hend.	1 56 17.42	10 24 56.2	
	Arm.	17.55$_1$	57.2	
	Q. -	17.52$_2$	54.8$_1$	
	R. C.$_2$	17.53	54.5$_1$	
	Ad. - -	17.49	56.0	
632	Arm. -	1 56 51.32	17 39 7.3$_2$	
	Q. - .	51.22$_1$	5.6$_2$	
	Ay. 60 -	51.47	6.0	
	Ay. 64 -	51.39	5.6	
	Main	51.47	6.2	
	Ay. 72 - -	51.44	5.6	
	Ad. - - -	51.42	6.0	

DETAILS OF POSITIONS—DIVISION II.

BRITISH ASSOCIATION CATALOGUE STARS.

FROM $+20°$ TO $+30°$ DECLINATION.

No.	Authority.	Right ascension.	Declination.	Remarks.
		h. m. s.	° ′ ″	
4100	Tayl. - - - - - - - -	12 4 [25.23]	27 58 38.2	The P. M. used (— 0″.05) in decl. was determined by comparison with Piazzi.
	Yarn. - - - - -	24.95$_2$	37.4	
	Ay. 64.68 - -	24.97	38.2	
	Main - -	24.89	38.1	
	Ad. - -	24.93	38.0	
4107	Mädl. - -	12 5 30.54	26 34 0.5	
	Arm. -	30.36	0.4	
	Ay. 60 - - - -	30.59	0.1	
	Main	30.57	0.8	
	Ay. 72 - -	30.45$_1$	0.6	
	Ad. - - - - - -	30.51	0.5	
4110	Mädl. - -	12 5 [47.28]	21 14 18.4	Mädler's A. R. and P. M. in A. R. have been omitted.
	Arm. - -	47.82	18.8	
	Ay. 64 - - - - - -	47.81	17.1	
	Main - -	47.82	18.6	
	Ad. -	47.82	17.8	
4127	Mädl. - - -	12 10 1.03	24 38 27.3	The declinations of Ay. have each had wt. = 1½.
	Arm. - -	0.98$_2$	24.3	
	Ay. 60 - - - -	0.86	25.6	
	Ay. 64 - -	0.97	25.2	
	Ay. 70 - - - - -	0.98	25.2	
	Ad. -	0.96	25.5	
4139	Arm. - - - - - - - -	12 12 . .	26 42 11.3$_2$	The P. M. used (— 0″.03) was obtained by comparison with Piazzi.
	Q. -	43.71$_2$	10.0$_2$	
	Main - - - - -	43.71	11.1	
	Ad. - - - -	43.71	10.8	
4141	Mädl. - -	12 13 0.50	23 43 45.5	
	Yarn. - - - -	0.25	43.9	
	Ay. 60 - - - - -	0.30$_2$	45.6	
	Main - - - -	0.36$_2$	44.8	
	Ay. 73 - - -	. .	45.2	
	Ad. - - - -	0.36	44.9	
4142	Mädl. -	12 13 13.74	28 51 19.0	
	Arm. - -	13.76	20.5	
	R. C.$_2$ -	13.76	19.3	
	Bonn. - -	13.74	19.2	
	Ay. 64 - - - -	13.79	19.6	
	Ad. -	13.76	19.6	
4147	Mädl.	12 13 [33.56]	29 9 34.1	
	Hend. - - - - -	. .	32.5	
	Arm. - - - -	33.19$_1$	[34.7]	
	R. C.$_2$ - - - -	33.35$_2$	29.5$_2$	
	Ay. 64 - - - - -	33.30	31.5	
	Q. -	33.33$_3$	31.0$_2$	
	Ad. -	33.30	31.3	
4152	Tayl. - - - -	12 14 [1.83$_2$]	26 41 43.5	P. M. used + 0″.03; from Piazzi. Both co-ordinates are uncertain. Main 73 gives 1^s.09, 42″.7.
	Arm. - -	. .	46.5$_2$	
	Q. -	1.40$_2$	43.0$_2$	
	Main -	1.22$_2$	43.8$_2$	
	Ad. - - -	1.31	44.1	
4153	Jac. - - - - -	12 14 2.42	27 19 5.6	If a P. M. of — 0″.13, indicated by Lal., is correct, the decl. for 1875.0 will be 27° 19′ 2″.0. New observations are much needed.
	Yarn. -	2.53$_2$	3.4	
	Main - -	2.49$_1$	4.3	
	Smyth	2.64	2.6	
	Ad. - - -	2.52	4.0	
4169	Mädl. -	12 16 13.19	26 32 24.8	
	Arm.	13.13	23.9	
	Ay. 60 - - -	13.22	24.8	
	Yarn. - - -	13.19	25.1$_2$	
	Ay. 72 -	. .	24.1	
	Ad. - - -	13.18	24.5	

No.	Authority.	Right ascension.	Declination.	Remarks.
		h. m. s.	° ′ ″	
4178	Tayl.	12 17 47.03	26 32 41.1	Lal. gives P. M. —0″.04 { Used 0. Simi-
	Arm.	47.05$_1$	41.7	Pi. " " +0″.01 } larly in A. R.
	Main	46.98	40.8	
	Ad.	47.01	41.2	
4181	Mädl.	12 18 2.19	26 47 31.2	Pulcova 1841 gives 31″.1.
	Arm.	2.09	30.7	
	Ay. 50	. .	31.4$_2$	
	Ay. 60	2.27	31.1	
	Q.	2.13$_2$	30.9	
	Ad.	2.17	31.0	
4184	Arm.	12 18 57.62	24 37 13.	The approximate P. M. used (+0^s.005
	R. C.$_2$	57.69	12.7	—0″.05) was obtained by comparison
	Q.	57.68	12.9	with Piazzi.
	Kbg.	57.89$_1$	15.5$_2$	
	Ay. 64	57.70	12.4	
	Yarn.	57.63$_2$	14.0	
	Ay. 72	57.70	13.7	
	Ad.	57.69	13.4	
4191	Mädl.	12 20 8.90	27 57 39.6	
	Arm.	8.99	39.4	
	Ay. 60	8.96	39.3	
	Kbg.	8.93	39.5	
	Ay. 64	8.88	39.1	
	Ad.	8.93	39.3	
4195	Mädl.	12 20 42.47	28 57 48.0	Airy 71 includes observations made in
	Arm.	42.31	48.8	1872 and 1873 with the catalogue place
	R. C.$_2$	42.39	48.9	1864.
	Ay. 60	42.37	48.9	
	Kbg.	42.12$_1$	48.8$_1$	
	Q.	42.18$_2$	48.0$_1$	
	Main	42.43	49.8	
	Ay. 71	42.34	48.7	
	Ad.	42.35	48.9	
4196	Mädl.	12 20 44.30	27 31 6.8	Mädler's P. M. in A. R. was omitted in
	Arm.	44.14	5.1$_2$	reducing the other authorities.
	Kbg.	44.46$_2$	4 4$_2$	
	Ay. 60	44.21	5.8	
	Q.	44.12	5.1	
	Ay. 64	44.18$_2$	5.8$_2$	
	Yarn.	44.11$_1$	4.0$_2$	
	Ad.	44.22	5.1	
4199	Mädl.	12 21 23.23	26 36 16.2	I have omitted Mädler's P. M. in A. R.
	Arm.	23.29	18.2$_2$	That in declination may, perhaps, be
	Jac.	[22.87]	15.4	—0″.08, which would make the decl.
	R. C.$_2$	23.09	16.2	15″.1. The star needs reobserving
	Q.	23.12	16.2	soon.
	Ay. 64	23.21	16.3	
	Smyth	23.23	16.0	
	Main	23.17	17.0	
	Ad.	23.19	16.4	
4205	Jac.	12 22 23.46	26 55 8.0	
	Ay. 50	. .	8.2$_2$	
	Ay. 60	23.53	8.6$_{12}$	
	Q.	23.41$_2$	8.4$_2$	
	Smyth	23.53	9.0	
	Main	23.54	7.0	
	Ad.	23.51	8.3	
4206	Mädl.	12 22 [30.16]	26 35 32.9	
	Arm.	29.87	31.2	
	Q.	29.79	30.2	
	Ay. 64	29.93	30.5	
	Main	29.81	29.6	
	Ad.	29.85	30.4	

No.	Authority.	Right ascension.	Declination.	Remarks.
		h. m. s.	° ′ ″	
4207	Mädl.	12 22 40.19	26 36 17.6	
	Arm.	40.13	18.2	
	Q.	40.06	19.9	
	Ay. 64	40.16	19.2	
	Main	40.10	18.7	
	Ad.	40.13	19.0	
4209	Mädl. *corrected*	12 23 11.86	24 48 1.5	
	Arm.	11.74	1.0	
	Q.	11.66$_1$	1.0$_2$	
	Ad.	11.77	1.2	
4212	St.	12 23 26.52	21 35 19.0	
	R. C.$_2$	26.48	18.2$_2$	
	Yarn.	26.37	18.8	
	Q.	- -	18.0$_2$	
	Pulc.	26.42	18.4	
	Ad.	26.46	18.6	
4223	Mädl.	12 24 46.14	25 15 28.6	
	Arm.	46.12$_2$	30.8	
	Ay. 64	45.96	30.3	
	Main 65	45.98	29.3	
	Wn. 67	45.92	30.7	
	Ay. 72	- -	31.1$_2$	
	Ad.	46.02	30.4	
4231	Jac.	12 27 18.26	25 8 20.1	
	Smyth	18.49	19.5	
	Main	18.38	18.4	
	Q.	18.39$_1$	19.3$_1$	
	Ad.	18.38	19.3	
4232	Mädl.	12 27 20.30	24 58 24.3	
	Arm.	20.13	23.6	
	Yarn.	20.31	22.6$_1$	
	Kbg.	20.37$_1$	23.3$_1$	
	Ay. 64	20.31	23.4	
	Wn. 67	20.35	23.4	
	Main	20.32	23.0	
	Ad.	20.29	23.3	
4240	Arm.	12 28 37.35	23 19 5.7$_2$	The Paris determination (as a fundamental star) has double weight. P. M. $+0''.02$ from Piazzi.
	R. C.$_2$	37.34	3.8$_2$	
	Ay. 60	37.36	5.2	
	Q.	37.29$_1$	3.2$_2$	
	Paris	37.31	4.9	
	Ay. 64–71	37.24$_1$	5.4	
	Ad.	37.32	4.8	
4260	Mädl.	12 32 54.25	21 45 1.7	
	Arm.	54.08	1.8	
	Ay. 64	54.13	1.4	
	Q.	54.15	1.4	
	Main	54.19	2.2	
	Ay. 72	54.07$_2$	1.6	
	Ad.	54.15	1.7	
4304	Mädl.	12 43 11.96	28 14 1.3	
	Arm.	11.84	0.9$_2$	
	Ay. 50		0.8	
	Ay. 60	- -	0.4$_2$	
	Ay. 64	11.94	0.8	
	Q.	11.88$_2$	0.0	
	Ay. 72	11.99	1.6	
	Ad.	11.92	0.8	
4315	Mädl.	12 45 36.61	28 13 17.6	Ay. 64, 70, and Main received weights 2, 2, 1½ in declination; 1½, 1½, 1 in A. R.
	Arm.	36.46	17.4	
	Ay. 64	36.51	16.8	
	Q.	36.55$_2$	16.6	
	Main	36.49	16.6	
	Ay. 70	36.53	17.2	
	Ad.	36.53	16.9	

No.	Authority.	Right ascension.			Declination.			Remarks.
		h.	*m.*	*s.*	°	′	″	
4328	Mädl.	12	47	8.34	21	55	29.3	
	Arm.			8.37			29.1	
	Ay. 50			. .			30.0	
	Ay. 60			8.40			30.1	
	Ay. 72			8.36_2			30.6	
	Ad.			8.37			30.0	
4364	Jac.	12	55	27.93	21	56	36.0	Smyth received double weight in decl. P. M. uncertain and assumed = 0.
	Smyth			28.05			36.4	
	Main			28.02			35.3	
	Q.			27.81_1			35.5_1	
	Ad.			27.97			36.0	
4387	Mädl.	13	0	15.80	21	49	28.1	
	Arm.			15.70			29.1	
	Ay. 60			15.67			28.0	
	Q.			15.44			27.3_2	
	Ay. 73			15.66_1			28.4	
	Ad.			15.65			28.3	
4388	Mädl.	13	0	17.60	23	17	17.6	
	Arm.			17.61			15.7	
	Ay. 64			17.57			14.1	
	Main			17.53			14.3	
	Wn. 67			17.53			14.7	
	Ad.			17.57			14.7	
4390	Mädl.	13	1	10.85	28	17	45.9	
	Arm.			10.73			47.0_2	
	Ay. 50			10.84			45.9	
	Q.			10.73			44.5	
	Ay. 64			10.77_2			45.7	
	Yarn.			10.78			44.2_2	
	Ay. 70			10.79			46.2	
	Ad.			10.78			45.6	
4393	Mädl.	13	1	54.59	28	13	33.4	
	Arm.			[54.17$_1$]			37.7_2	
	R. C.$_2$			54.46			34.6	
	Q.			54.55			34.7	
	Ay. 64			54.59			35.3	
	Ad.			54.55			35.6	
4421	St.	13	6	2.34	28	30	44.7	Smyth has had a weight 2 in decl. (41 observations).
	Q.			2.36			43.4	
	Yarn.			2.32_2			43.1	
	Smyth			2.40			43.9	
	Ay. 72			2.33_1			44.5_1	
	Ad.			2.34			44.1	
4513	Jac.	13	24	56.32	24	52	56.8	
	Q.			56.54_2			56.0_2	
	Ay. 64			56.58			56.6	
	Smyth			56.69			56.9	
	Main			56.53			57.6	
	Ad.			56.53			56.8	
4526	Q.	13	26	52.77_2	24	59	49.1	A possible P. M. of −0″.18 (Lal.) would give 24° 59′ 47″.7 for 1875.0; but perhaps Lal. is 15″ wrong.
	Smyth			52.81			49.2	
	Wn. 67			52.83			49.2	
	Main			52.83_2			49.5	
	Ad.			52.81			49.3	The P. M. confirmed by Wn. 1874.
4553	Arm.	13	32	6.62_1	23	10	4.6	The star's A. R. is uncertain and needs reobserving. I have used P. M. in decl. −0″.06 from Piazzi.
	Yarn.			6.44_2			2.4	
	Q.			6.45_1			3.0_2	
	Main			6.48_2			3.3_1	
	Ad.			6.49			3.4	

No.	Authority.	Right ascension.			Declination.			Remarks.
		h.	*m.*	*s.*	°	′	″	
4562	Mädl.	13	34	42.17	20	35	20.2	Ay. 60–64 and Ay. 70 receive double weight.
	Arm.			42.11			20.7	
	Q.			42.20			19.8	
	Ay. 60–64			42.24			19.1	
	Wn. 67			42.21			19.8	
	Main			42.24			19.8	
	Ay. 70			42.23			19.2	
	Ad.			42.20			19.6	
4563	Ay. 40–45	13	34	42.77	20	38	48.6_2	P. M. in decl. used + 0″.05, from Piazzi.
	Arm.			42.78_2			49.3	
	Q.			42.67			47.9	
	Main			42.53			47.5_1	
	Ad.			42.69			48.3	
4566	Mädl.	13	35	7.55	23	7	50.2	
	Arm.			7.47			47.6	
	Yarn.			7.53			47.4	
	Ay. 64			7.49			47.2	
	Wn. 67			7.58			47.8	
	Main			7.57			47.4	
	Ay. 73						47.2	
	Ad.			7.53			47.4	
4575	Jac.	13	37	50.65	23	19	53.7	P. M. in decl. used —0″.02. See note to C. A. 310. Smyth's weight = 1½ in decl.
	Ay. 60						53.7_2	
	Ay. 64			50.80			52.7	
	Smyth			50.86			53.6	
	Main			50.75			53.3	
	Ad.			50.76			53.4	
4594	Mädl.	13	40	54.95	26	19	48.8	Weight of Ay. 72 = 1½ in decl.
	Arm.			55.03			48.3	
	Yarn.			55.01			47.4	
	Kbg.			54.96_2			49.2_2	
	Ay. 72			55.01_1			48.6	
	Ad.			54.99			48.3	
4618	Hend.	13	43	48.35	21	53	7.4	The P. M. in A. R. (+0^s.005) is taken from Argelander XLVIII (Bonner Beob. VII, 129).
	Arm.			48.16			8.0	
	R. C.$_2$			48.26_1			6.5_2	
	Kbg.			48.12_2			8.9_2	
	Yarn.			48.17			7.5_2	
	Arg.			48.22			6.8	
	Tiele			48.25			7.0_2	
	Ay. 64			48.18			7.3	
	Ad.			48.21			7.4	
4640	Arm.	13	47	30.26	29	15	50.5	P. M. used —0^s.005, 0″.00.
	Yarn.			30.14			48.7	
	Kbg.			30.10_2			51.1_2	
	Main			30.14			50.3	
	Wn. 67			30.16			50.8	
	Ad.			30.16			50.2	
4656	Mädl.	13	50	51.79	28	6	21.1	
	Arm.			51.71			21.9	
	Ay. 60			51.78			21.0	
	Kbg.			51.66_2			21.7_2	
	Ay. 64			51.71_2			20.0_2	
	Ay. 72			51.61_1			21.3	
	Ad.			51.72			21.2	
4664	Mädl.	13	52	47.59	22	18	23.8	
	Arm.			47.55			23.6	
	Kbg.			47.50_2			25.8_2	
	Ay. 64			47.53			24.7	
	Wn. 67			47.51			25.3	
	Main			47.53			25.1	
	Ay. 72			47.51_1			24.8_1	
	Ad.			47.53			24.9	

No.	Authority.	Right ascension.			Declination.			Remarks.
		h.	*m.*	*s.*	°	′	″	
4675	St.	13	55	30.36	27	59	28.3	Weight of Main, ½ in decl.; of St. and and Pulc., 2.
	Yarn.			30.41$_2$			27.3$_2$	
	Wn. 67			30.43$_2$			29.1	
	Main			30.41			28.0	
	Ay. 72			. .			28.8	
	Pulc.			30.40			27.9	
	Ad.			30.39			28.2	
4706	St.	14	4	41.94	25	41	4.9	Weight of Ay. 73 in decl., 1½; of St. and Pulc., 2.
	Kbg.			41.88$_2$			4.4$_2$	
	Yarn.			41.93			4.9	
	Wn. 67			41.84			5.1	
	Pulc.			41.84			4.9	
	Ay. 73			41.87			4.8	
	Ad.			41.89			4.8	
4723	R. C.$_2$	14	8	21.01$_1$	29	41	25.8$_2$	Smyth has a weight of 2 in decl. (22 obs.). The A. R. is uncertain; Lalande gives 22^s.42.
	Q.			21.14$_1$			25.2$_1$	
	Smyth			21.19			26.4	
	Ad.			21.13			26.1	
4809	R. C.$_2$	14	26	48.16	27	13	53.5$_2$	Both co-ordinates uncertain; decl. perhaps 51″.6 with P. M. of −0″.08 (Lal.); P. M. confirmed by B. Z., and finally adopted.
	Smyth			48.46			51.7	
	Q.			48.28			52.0$_2$	
	Wn. 67			[47.38$_2$]			52.9	
	Main			48.23			52.0	
	Ad.			48.28			52.4	
4810	Mädl.	14	26	51.63	22	48	42.2	
	Arm.			51.70			43.0	
	Yarn.			51.62$_2$			39.6	
	Ay. 64			51.68			40.8	
	Kbg.			51.57			42.0	
	Q.			51.68			40.2	
	Main			51.64			41.3	
	Wn. 67			51.92$_2$			40.1	
	Ad.			51.67			41.0	
4864	Mädl.	14	37	[55.98]	27	3	37.6	Mädler's P. M. in A. R. has been omitted.
	Yarn.			55.69			35.9$_2$	
	Ay. 60			55.72			37.5	
	Kbg.			55.70			40.6$_2$	
	Ay. 72			55.72$_2$			37.0	
	Ad.			55.71			37.6	
4876	Arm.	14	39	31.70	27	36	8.0	
	Yarn.			31.68			7.4	
	Ay. 60			31.70			8.1	
	Ay. 64			31.68			7.9	
	Arg.			31.67			8.1	
	Eng.			31.63			7.0	
	Main 65			31.67			7.3	
	Paris			31.64			8.7	
	Main 70			31.70			8.4	
	Leid.			. .			7.5	
	Ay. 70			31.66			8.0	
	Ad.			31.67			7.9	
4902	Arm.	14	44		29	8	3.7	The possible P. M. of +0″.01 to 0″.02 (Piazzi) has been omitted.
	Ay. 40			. .			4.3	
	Ay. 45			35.38			5.4	
	Yarn.			35.42$_2$			3.5	
	Kbg.			35.49$_2$			7.2$_2$	
	Q.			35.46			4.2$_2$	
	Ay. 72			35.48$_1$			6.0$_1$	
	Ad.			35.44			4.7	
4953	Mädl. *corrected*	14	56	37.99	25	30	11.2	The P. D. of Ay. 1873 has been corrected by −10″.
	Arm.			38.00			13.7	
	Yarn.			37.94$_2$			10.7	
	Q.			38.00			10.7$_2$	
	Ay. 73			38.07$_1$			12.4$_1$	
	Ad.			37.99			11.7	

No.	Authority.	Right ascension.	Declination.	Remarks.
		h. *m.* *s.*	° ′ ″	
4962	Mädl.	14 58 26.50	27 34 33.8	The P. M. used in decl. (−0″.04) was from Piazzi. Mädler's value, +0″.209, is quite wrong.
	Arm.	26.52	15.4	
	R. C.$_2$	26.44	15.3	
	Q.	26.61$_2$	15.2$_2$	
	Ay. 64	26.58	15.7	
	Wn. 67	26.58	16.2	
	Ad.	26.54	15.6	
4969	St.	14 59 5.38	27 26 9.7	Weights for decl. in their order: 4, 1, 1, 2, 1½, 2, 1½, 2.
	Eng.	5.46	10.2	
	R. C.$_2$	5.35	8.9	
	Ay. 64	5.37	10.1	
	Main 65	5.39	10.5	
	Main 70	5.39	10.5	
	Ay. 70	5.37	10.1	
	Pulc.	5.37	9.6	
	Ad.	5.38	10.0	
4981	Mädl.	15 1 48.40	25 21 26.5	
	Arm.	48.42	25.8$_1$	
	R. C.$_2$	48.65	23.9$_2$	
	Q.	48.63	25.1$_2$	
	Ay.	48.59$_2$	24.4$_2$	
	Kbg.	48.69$_1$	26.7$_1$	
	Yarn.	48.69$_2$	25.8	
	Ad.	48.57	25.2	
4991	Mädl.	15 3 0.04	26 46 53.7	
	Arm.	2 59.99	51.5$_1$	
	Ay. 50	. .	52.3$_2$	
	Yarn.	3 0.00$_2$	51.9$_2$	
	Q.	2 59.89$_1$	51.8$_2$	
	Kbg.	3 0.02$_2$	52.8$_2$	
	Ay. 72	0.01$_1$	52.1$_1$	
	Ad.	3 0.00	52.1	
4993	Hend.	15 3 . .	25 35 17.8	Piazzi and Lal. indicate a P. M. of +0″.015 in decl., which has not been used. The star needs reobservation. Lalande (1 obs.) gives 38ˢ.82 (uncorrected) and 18″.9 (with S. C.).
	Arm.	8.80$_1$	18.1$_1$	
	Ay. 45	8.79	16.5	
	Yarn.	8.76	16.5	
	Q.	8.80	16.7$_2$	
	Ad.	8.79	17.0	
5001	Q.	15 5 38.28$_2$	29 42 15.1$_1$	
	Yarn.	38.42$_2$	16.6$_2$	
	Smyth	38.57	15.3	
	Main	38.42	16.5	
	Ad.	38.44	15.9	
5031	Mädl.	15 9 15.46	29 37 45.2	
	Arm.	15.44	45.9	
	Ay. 60	15.61	45.7	
	Q.	15.43$_1$	44.3$_1$	
	Kbg.	15.50$_2$	46.9$_2$	
	Ay. 72	. .	45.6	
	Ad.	15.49	45.8	
5043	Hend.	15 12 . .	21 1 52.5	
	Arm.	48.21	52.6$_2$	
	Yarn.	48.16$_2$	51.1	
	Ay. 60	48.36	53.0	
	Ad.	48.25	52.3	
5098	St.	15 22 40.57	29 32 15.4	St. has received a weight 3.
	Arm.	40.64	15.3$_1$	
	Kbg.	40.35	16.4	
	Q.	40.55$_2$	15.3	
	Ay. 73	40.58$_1$	. .	
	Ad.	40.54	15.6	

No.	Authority.	Right ascension.	Declination.	Remarks.
		h. m. s.	° ′ ″	
5143	St.	15 29 23.74	27 8 11.9	
	R. C_2	23.75	10.9	
	Ay. 64	23.73	11.4	
	Gyld.	. .	11.7	
	Main 65	23.74	11.4	
	Ay. 70	23.76	11.6	
	Leid.	23.73	12.0	
	Wn. 70	. .	12.1	
	Ad.	23.74	11.9	
5187	Mädl.	15 35 58.60	20 4 29.4	
	Arm.	58.58$_2$	29.3$_2$	
	Ay. 60	58.70	27.5	
	Kbg.	58.50$_2$	29.6$_2$	
	Q.	58.59	25.6$_2$	
	Wn. 72	58.71$_2$	27.0$_2$	
	Ad.	58.62	27.8	
5192	St.	15 37 29.67	26 41 33.6	
	Arm.	29.56	34.9	
	Main	29.61	34.4	
	Wn. 67	29.65	33.5	
	Ay. 72	29.71$_1$	33.5$_1$	
	Ad.	29.64	33.9	
5236	Arm.	15 43 . .	28 32 28.8	P M. in decl. used = — 0″.02, from Piazzi.
	Yarn.	25.36$_2$	26.8	
	Bonn.	25.44	29.1	
	Q.	25.39$_2$	27.9	
	Ad.	25.40	28.2	
5244	Mädl.	15 44 21.09	26 27 9.7	Weights (in decl.) for Ay. 64 and Ay. 70, 1½ each.
	Ay. 60	21.14	7.8	
	Ay. 64	21.08	7.9	
	Q.	21.05	7.3$_2$	
	Yarn.	21.33$_1$	9.2$_2$	
	Ay. 70	21.11	8.1	
	Ad.	21.10	8.0	
5252	Mädl.	15 45 46.57	21 21 19.4	
	Arm.	46.65	19.0	
	Yarn.	46.54$_2$	17.4	
	Ay. 60	46.61	17.7	
	Kbg.	46.58$_1$	20.6$_1$	
	Ay. 64	46.56	. .	
	Ad.	46.59	18.4	
5273	Hend.	15 49 . .	20 40 45.2	P. M. used — 0^s.007, + 0″.05, from Lal. and Piazzi.
	Ay. 40	3.92	. .	
	Ay. 45	. .	44.4	
	Arm.	3.89	44.8	
	Yarn.	4.00$_2$	42.0	
	Kbg.	4.23$_1$	45.4$_1$	
	Q.	4.00$_2$	42.2$_1$	
	Ad.	3.98	44.0	
5302	St.	15 52 24.83	27 14 27.8	Weight of Ay. 70, 1½.
	Yarn.	24.85	27.5$_2$	
	Wn. 72	24.75$_2$	29.8$_2$	
	Ay. 70	24.78	28.2	
	Ay. 73	. .	28.1	
	Ad.	24.81	28.1	
5322	Mädl. *corrected*	15 56 54.90	23 9 8.2	A Königsberg observation, which gives 12″.3, is excluded. Other observations, Paris 1864, 10″.4; Ay. 1874, 9″.9; Wn. 1874, 9″.4, were finally included.
	Ay. 60	54.84	9.8	
	Q.	54.95$_2$	7.7$_2$	
	Ad.	54.89	10.0	
5399	Mädl. *corrected*	16 6 18.86	23 49 9.5	Mädler is included. Final result, with — 0″.02 P. M. and including Pulcova, 9″.1; gives for 1875.0 23° 49′ 9″.1.
	Kbg.	18.92	7.5	
	Q.	18.85$_2$	8.5$_2$	
	Arm.	18.79	8.9$_1$	
	Ad.	18.86	8.6	

No.	Authority.	Right ascension.			Declination.			Remarks.
		h.	*m.*	*s.*	°	′	″	
5434	Mädl.	16	10	56.87	23	26	7.0	
	Q.			56.84$_2$			5.1$_1$	
	Kbg.			56.82$_1$			7.0$_1$	
	Main			57.08			5.7	
	Wn. 72			56.91			5.0	
	Ad.			56.91			5.6	
5440	Mädl.	16	11	44.54	29	27	38.8	
	Arm.			44.43			40.5$_1$	
	Kbg.			44.28			38.2	
	Ay. 64			44.39			38.0	
	Main			44.46			38.7	
	Ad.			44.42			38.6	
5444	Mädl.	16	12	33.09	23	54	49.0	
	Arm.			33.24$_1$			49.4	
	Q.			33.23$_1$			47.4$_1$	
	Ay. 64			33.15			49.3	
	Main			33.11			47.5$_2$	
	Ad.			33.15			48.6	
5448	Mädl.	16	13	12.88	26	12	9.1	
	Arm.			. .			8.9	
	Kbg.			13.00$_1$			9.5$_1$	
	Ay. 64			12.90			7.7	
	Main			12.88			9.4	
	Ad.			12.90			8.8	
5452	Q.	16	14	38.98	21	26	10.4$_2$	Smyth (17 obs. in decl.) has wt. = 1½. A P. M. of — 0″.06 is possible, and would give 8″.6 for 1875.0.
	Ay. 64			38.98			9.1	
	Smyth			39.09			8.7	
	Main			39.04			9.3	
	Ad.			39.02			9.2	
5525	St.	16	24	50.82	21	45	48.7	Ay. 70 has a weight 1½.
	R. C.$_2$			50.83			48.8	
	Kbg.			50.80$_2$			48.2$_2$	
	Q.			50.82$_2$			51.0	
	Yarn.			50.81$_2$			47.5	
	Main			50.88$_2$			47.5$_2$	
	Ay. 70			50.78			47.7	
	Leid.			. .			47.9	
	Ad.			50.82			48.2	
5527	Yarn.	16	25	7.92	20	45	14.5	Declination uncertain. Lalande gives 20° 45′ 34″.9; D'Agelet 19″.6. Hence an error of 15″ in L. L. and proper motion probable.
	R. C.$_2$			7.98			14.7$_1$	
	Bonn.			8.06$_2$			16.1$_2$	
	Q.			7.92$_2$			13.8$_2$	
	Smyth			8.16			16.0	
	Ad.			8.01			15.1	
5530	Ay. 64	16	25	52.56	22	27	56.4	Two observations of Lalande give 57″.0; no P. M.
	Q.			52.50$_2$			56.1$_1$	
	Main			52.60$_2$			58.1	
	Ad.			52.55			56.8	
5597	Yarn.	16	35	49.57	25	6	2.9	The P. M. indicated by Lal. is — 0″.06; not confirmed.
	Smyth			49.82			4.9	
	Q.			49.61$_2$			5.0$_1$	
	Main			49.79$_2$			4.8	
	Ad.			49.70			4.4	
5602	Mädl.	16	36	[31.85]	27	9	32.7	Mädler's P. M. in A. R. (0″.092) is manifestly incorrect, and has been omitted.
	Arm.			.			33.3$_2$	
	Ay. 60			32.59$_2$			32.8	
	Kbg.			32.44$_1$			33.5$_1$	
	Wn. 67			32.51			32.8	
	Yarn.			32.51			30.7$_2$	
	Main			32.51$_3$			33.5	
	Ad.			32.52			32.8	

No.	Authority.	Right ascension.			Declination.			Remarks.
		h.	*m.*	*s.*	°	′	″	
5624	Mädl.	16	40	6.59	28	35	15.0	As Bradley has no decl., Mädler's P. M., which is confirmed by Piazzi, is retained.
	Arm.			- -			16.0	
	Kbg.			6.93_1			17.6_1	
	Ay. 64			6.66			15.0	
	Main			6.75			16.3	
	Ad.			6.71			16.0	
5677	Mädl.	16	46	34.34	24	52	6.4	Weight of Ay. 64 in decl., $1\frac{1}{2}$.
	Kbg.			34.29			3.9	
	Yarn.			34.34			4.1	
	Main			34.34			4.4	
	Ay. 64			34.33			4.8	
	Ad.			34.33			4.4	
5703	Mädl.	16	49	55.14	25	56	0.1	
	Arm.			55.23			0.2	
	Ay. 64			55.20			0.5	
	Main			55.25			0.9	
	Wn. 72			55.30			0.1	
	Ad.			55.22			0.4	
5714	Mädl.	16	52	23.23	25	32	50.8	
	Arm.			23.16			50.4	
	Ay. 64			23.18			49.5	
	Q.			23.16_2			49.8	
	Wn. 67			23.18			49.9	
	Main			23.26			51.0	
	Ay. 70			23.11_1			50.1	
	Ad.			23.19			50.1	
5786	Mädl.	17	3	23.51	24	39	4.3	
	Ay. 64			23.53			3.0	
	Q.			- -			1.4_2	
	Main 70			23.60_2			4.4_2	
	Ad.			23.54			2.9	
5798	Mädl.	17	5	[53.06]	24	23	33.0	A. R. doubtful on account of Piazzi. I have used Mädler's P. M.
	Arm.			52.86_1			31.8	
	R. C.$_2$			52.76			29.3	
	Q.			52.84			30.6	
	Wn. 67			52.71			30.8	
	Ad.			52.78			30.5	
5828	St.	17	9	53.84	24	59	16.6	
	Yarn.			53.79_2			15.3	
	R. C.$_2$			53.77			16.0_2	
	Q.			53.78_2			16.6_2	
	Wn. 67			53.95			17.2	
	Main			53.85			16.7	
	Wn. 72			53.86_2			16.7_2	
	Ay. 72			53.83_2			17.5	
	Ad.			53.84			16.6	
5860	Mädl.	17	15	45.35	24	37	31.8	
	Arm.			45.29			28.8_2	
	Yarn.			45.29			29.4	
	Q.			45.22_1			30.4_2	
	Ay. 64			45.24			31.2	
	Ay. 70			45.29			30.7	
	Ad.			45.29			30.3	
5883	Mädl. *corrected*	17	18	52.88	23	4	40.7	
	Yarn.			52.78			39.3	
	Q.			52.77			40.4_2	
	R. C.$_2$			52.79			39.5	
	Ad.			52.80			40.0	

No.	Authority.	Right ascension.			Declination.			Remarks.
		h.	*m.*	*s.*	°	′	″	
5900	Ay. 40	17	21	25.31	20	11	. .	Weight of Ay. 73, 1½ in decl.
	Ay. 45			. .			19.6	
	Arm.			25.31			20.0$_1$	
	Yarn.			25.39			18.7	
	Q.			25.35			19.8	
	Kbg.			25.39$_1$			21.3$_1$	
	Ay. 64			25.43$_2$			20.0	
	Ay. 73			25.45			20.4	
	Ad.			25.37			19.9	
5922	Mädl.	17	25	41.13	26	12	24.6	Weights of Main and Ay. 72 in decl., 1½ each.
	Arm.			41.17			24.1	
	Ay. 60			41.15			22.3	
	Kbg.			41.11			24.7	
	Q.			41.05			23.5$_2$	
	Yarn.			41.23			23.1$_2$	
	Main			41.30			22.8	
	Ay. 72			41.18			22.4	
	Ad.			41.17			23.0	
5931	Mädl.	17	26	55.07	28	29	59.4	
	Bonn.			55.08$_2$			57.9$_2$	
	Ay. 64			55.05			57.6	
	Kbg.			54.93$_1$			59.8$_1$	
	Q.			55.09$_2$			56.2$_1$	
	Main			55.09			56.9	
	Ay. 72			55.08			58.4	
	Ad.			55.07			57.7	
5967	Mädl. *corrected*	17	32	22.18	24	23	8.0	Declination confirmed by later data: Pulc., 9″.2; Wn. 75, 8″.2.
	Arm.			22.17			9.4	
	Ad.			22.17			8.5	
5988	Mädl.	17	35	57.34	24	34	35.2	
	Arm.			57.48			36.1$_2$	
	R. C.$_2$			57.43			34.6	
	Q.			57.43$_2$			34.3	
	Kbg.			57.39$_1$			32.8$_1$	
	Main			57.48			35.5	
	Ay. 72			57.48$_2$			35.1$_2$	
	Ad.			57.44			34.9	
5994	T.	17	36	35.21	24	38	16.6	Piazzi gives in decl. 13″.4; Lalande gives 16″.0.
	Arm.			35.37$_1$			14.0$_1$	
	R. C.$_2$			. .			13.6	
	Q.			35.20$_1$			12.0	
	Ad.			35.25			14.0	
5999	Mädl.	17	37	20.81	24	37	41.4	I have used the P. M. in decl. from the Åbo. catalogue. See the note to C. A., 413.
	Arm.			20.99			42.9	
	Q.			20.81$_3$			42.0	
	Ay. 64			20.85			42.4	
	Main			20.91			42.5	
	Ay. 72			20.90			42.7	
	Ad.			20.88			42.5	
6005	Mädl.	17	38	13.86	24	23	2.9	
	Arm.			13.73			1.7	
	Yarn.			13.73$_2$			0.0	
	R. C.$_2$			13.79			0.4	
	Kbg.			13.70$_2$			1.1$_2$	
	Ay. 64			13.80			0.7	
	Ay. 73			. .			1.0$_2$	
	Ad.			13.77			0.8	

No.	Authority.	Right ascension.			Declination.			Remarks.
		h.	*m.*	*s.*	°	′	″	
6021	St.	17	41	34.01	27	47	42.6	
	Yarn.			34.00			42.1	
	R. $C._2$			33.95			42.1	
	Ay. 64			34.03			42.3	
	Main 65			34.00			43.3	
	Arg.			34.02			42.0	
	Eng.			34.02			41.9	
	Leid.			. .			42.7	
	Ay. 70			34.00			42.4	
	Main 70			34.00			42.3	
	Ad.			34.01			42.4	
6033	Mädl.	17	43	45.12	25	39	57.6	
	Arm.			44.95			58.1	
	Yarn.			45.04_2			56.0	
	R. $C._2$			44.97			57.7	
	Ay. 60			45.10			57.2	
	Q.			45.06			56.8_2	
	Kbg.			45.10			58.0_2	
	Ay. 72			. .			57.2	
	Ay. 73			45.04			57.2	
	Ad.			45.05			57.2	
6073	Mädl.	17	50	22.78	26	4	16.6	The star is a fundamental one at Greenwich and Oxford, and Ay. and Main receive weight $= 1\frac{1}{2}$.
	Arm.			22.72			17.5_2	
	Yarn.			22.62			16.3	
	Ay. 60			22.68			16.6	
	Q.			22.60			16.5	
	Ay. 64			22.64			16.6	
	Main 65			22.62			16.8	
	Main 70			22.70			17.2	
	Ay. 70			22.63			17.2	
	Wn. 72			22.72_2			16.9_2	
	Ad.			22.67			16.8	
6084	St.	17	52	54.38	29	15	44.6	I have given Pulc. a weight $= 1$ in declination; it seems not to have been used in St.
	Pulc.			54.41			45.8_2	
	Arm.						46.0_2	
	Ay. 50						44.9	
	Kbg.						45.1	
	Ay. 60						44.3	
	Q.			54.41			45.7	
	Ay. 72			54.41_2			45.6_2	
	Ad.			54.40			45.3	
6106	Mädl.	17	56	[11.85]	21	35	52.0	The position of the middle point between the two stars is here given.
	Q.			11.94			51.6_1	
	Main			11.99			51.7	
	Yarn.			11.98			50.7	
	Ay. 64			12.03_2			51.6_2	
	Wn. 67			12.06			52.7	
	Ad.			12.00			51.7	
6110	Mädl.	17	57	2.47	20	50	5.6	
	Arm.			2.45			7.0_2	
	Ay. 60			2.46			5.2	
	Kbg.			2.76_2			5.6_2	
	Ay. 64, 72			2.47_2			5.8	
	Main			2.42_1			4.5_2	
	Ad.			2.50			5.6	
6116	Mädl.	17	57	16.56	22	55	26.5	
	Arm.			16.50			26.8	
	Main			16.61			25.5	
	Ay. 64, 70			16.66			25.8	
	Ad.			16.64			26.0	
6134	Mädl.	18	0	46.19	22	12	32.2	
	Arm.			46.00			32.6_1	
	Ay. 64			. .			. .	
	Main			46.01			32.7	
	Ay. 72			46.06			32.6	
	Ad.			46.06			32.6	

No.	Authority.	Right ascension.			Declination.			Remarks.
		h.	*m.*	*s.*	°	′	″	
6150	St.	18	2	39.99	28	44	47.6	
	Kbg.			39.97			47.4	
	Wn. 72			40.08			48.1	
	Main			39.85$_1$			47.4	
	Ay. 70						47.5$_2$	
	Ad.			39.99			47.6	
6151	Mädl.	18	2	47.24	26	4	48.7	
	Arm.			47.32			49.3$_2$	
	R. C.$_2$			47.17			47.9	
	Yarn.			47.20$_2$			49.1$_2$	
	Q.			47.08$_2$			47.0$_2$	
	Kbg.			47.04$_2$			46.9$_2$	
	Ay. 64			47.10			48.6	
	Main			47.17$_2$			49.3$_1$	
	Ad.			47.17			48.2	
6152	Mädl.	18	2	47.17	26	5	3.5	
	Arm.			47.23			4.2$_2$	
	R. C.$_2$			47.21			2.1	
	Yarn.			47.12$_2$			4.1$_2$	
	Q.			47.12$_2$			1.4$_2$	
	Ay. 64			47.18$_1$			2.6$_1$	
	Ad.			47.17			2.8	
6157	Mädl.	18	3	[24.46]	20	47	45.7	
	Arm.			[24.46]			46.9$_2$	
	Kbg.			24.70			47.8	
	Q.			24.60$_2$			45.8$_1$	
	Ay. 64			24.73			46.1	
	Main			24.69			47.2	
	Ad.			24.68			46.9	
6159	Mädl.	18	3	[29.01]	20	1	38.5	There is much confusion in Mädler's data for A. R.
	Arm.			29.46			38.9	
	Kbg.			29.60$_1$			37.8$_1$	
	Ay. 64			29.51			37.7	
	Main			29.48$_2$			39.7	
	Ay. 72			29.46$_2$			37.2$_2$	
	Ad.			29.49			38.4	
6223	Mädl.	18	14	2.14	24	23	44.4	
	Ay. 50			2.16$_2$			45.0	
	Arm.			2.10			42.9	
	Ay. 60–64			2.08			43,4	
	Wn. 72			2.09			44.3	
	Ad.			2.11			43.9	
6231	Mädl.	18	15	0.61	21	54	37.2	
	Arm.			0.66			37.0$_1$	
	Q.			0.58$_2$			34.6$_2$	
	Kbg.			0.76$_1$			35.8$_1$	
	Ay. 64			0.64			34.7	
	Main			0.61$_2$			37.0$_2$	
	Ad.			0.64			35.7	
6232	Mädl.	18	15	2.77	29	36	47.2	
	Arm.			2.90			48.4$_1$	
	Q.			2.74$_2$			47.8$_2$	
	Main			2.73$_2$			48.5	
	Ad.			2.80			48.3	
6234	Mädl.	18	15	33.40	28	55	47.6	
	Arm.			33.30			46.6$_1$	
	Ay. 64			33.26			45.6	
	Main			33.34			45.3	
	Ad.			33.32			45.7	
6237	Mädl.	18	16	8.17	29	48	2.5	
	Arm.			8.31			4.6$_2$	
	R. C.$_2$			8.14			1.4	
	Q.			8.21			1.5	
	Kbg.			8.24$_1$			4.8$_1$	
	Ay. 64			8.24			2.5	
	Ad.			8.22			2.6	

No.	Authority.	Right ascension.			Declination.			Remarks.
		h.	*m.*	*s.*	°	′	″	
6238	Mädl. *corrected*	18	16	8.56	28	48	42.2	
	Kbg.			8.60$_1$			44.4$_1$	
	Ay. 64			8.42			42.9	
	Main			8.46$_2$			43.0$_2$	
	Ad.			8.50			42.9	
6241	Mädl.	18	16	55.80	23	13	23.0	Mädler's data in A. R. are of dates between 1835 and 1845 only; the final A. R. includes a later Greenwich observation (55^s.97) made in 1874.
	Arm.			55.77			21.8$_1$	
	Yarn.			55.89$_2$			22.7	
	Q.			. .			22.7$_2$	
	Wn. 67			55.93			24.1	
	Ay. 72			55.83$_1$			23.5	
	Ad.			55.91			23.1	
6251	St.	18	18	22.27	21	42	51.6	
	Arm.			22.10			53.2	
	R. C.$_2$			22.19			51.6	
	Ay. 68			22.30$_1$			50.6$_1$	
	Ad.			22.23			51.8	
6300	Hend.	18	24	24.83	23	47	5.6	Ay. 72 (13 obs. in decl.) has wt. = 1½. Piazzi, without P. M., gives 3″.4; Lalande, without P. M., gives 5″.5.
	Arm.			24.73			5.1$_2$	
	Q.			24.77			3.4$_2$	
	Ay. 64			24.79			3.9	
	Main			24.85			5.0$_2$	
	Ay. 72			24.78			3.6	
	Ay. 73			. .			3.6	
	Ad.			24.79			4.2	
6322	Ay. 40	18	27	. .	23	31	29.7$_2$	Ay. 72 (22 obs. in decl.) has double weight; the P. M. used is +0″.02, which gives C.—O. Pi. +0″.4, Lal. —1″.6.
	Hend.			34.17			32.1	
	Ay. 45			34.04			. .	
	Arm.			33.94			31.4	
	Yarn.			33.80			29.8	
	Q.			34.08			29.7$_2$	
	Ay. 64			34.07$_2$			30.5	
	Wn. 72			34.12$_2$			30.1$_2$	
	Ay. 72			34.08			30.0	
	Ay. 73			34.10$_1$			29.8	
	Ad.			34.04			30.4	
6341	Hend.	18	30	18.01	23	30	21.6	Ay. 72 (11 obs. in decl.) has weight = 1½.
	Ay. 40			18.03			20.5	
	Arm.			18.31			20.3	
	Yarn.			18.11$_2$			20.2$_2$	
	Q.			18.16			19.2$_2$	
	Ay. 72			18.28			21.4	
	Ay. 73			18.23$_1$			21.5	
	Ad.			18.14			20.8	
6387	St.	18	40	17.02	20	25	41.0	St. includes Ay. 64 besides the Pulcova observations about 1845.
	Kbg.			16.98			41.0	
	R. C.$_2$			16.96			40.3	
	Q.			16.92			40.8	
	Wn. 67			16.90			41.6	
	Wn. 72			16.95			40.5	
	Ad.			16.97			40.9	
6438	Mädl.	18	46	56.08	21	16	33.3	
	Arm.			55.97			32.4	
	Q.			55.96$_2$			33.0$_1$	
	Kbg.			55.92$_2$			33.5$_2$	
	Ay. 64			56.09			33.5	
	Main			56.13			35.2	
	Ad.			56.04			33.6	
6453	Mädl.	18	49	28.30	22	29	18.7	
	Arm.			28.22			18.2	
	Yarn.			28.23$_2$			16.0	
	Ay. 60			28.27			17.0	
	Ay. 64			28.25$_2$			17.4$_2$	
	Wn. 72			28.29$_2$			17.4$_2$	
	Ay. 71			28.27			17.2	
	Ay. 73			. .			17.8	
	Ad.			28.26			17.3	

No.	Authority.	Right ascension.			Declination.			Remarks.
		h.	*m.*	*s.*	°	′	″	
6542	Mädl.	19	0	51.74	24	3	24.0	Mädler's A. R. is taken directly from B. A. C., which is in some way wrongly reduced to 1850. The note in B. A. C. does not explain the error. I have assumed P. M. = 0; 1 obs. of Br. (Anwers) gives +0″.02; 2 obs. of Lal. give −0″.04.
	Arm.		1	25.60			31.0	
	R. C.$_2$			25.56			29.1	
	Ay. 60			25.68			30.1	
	Kbg.			25.79$_2$			30.9$_2$	
	Smyth			25.69$_2$			29.1$_2$	
	Q.			25.54$_1$			28.2$_1$	
	Ad.			25.64			29.9	
6547	Hend.	19	1	39.87	28	25	57.6	For the A. R. a P. M. of +0^s.008 is probable; this would give 40^s.13. Lalande's declinations are discordant and seemingly erroneous.
	Arm.			40.00			59.2	
	Q.			39.95			58.3	
	R. C.$_2$			39.92			58.0	
	Kbg.			40.14$_1$			60.1$_2$	
	Ay. 64			40.03			59.6	
	Ad.			39.97			58.8	
6574	Ay. 64	19	7	15.04	21	20	43.3	Lalande gives 14^s.14 without S. C.; and 41″.2 with S. C.
	Main			15.08			43.1	
	Smyth			15.01$_1$			43.6	
	Yarn.			14.95$_2$			43.2	
	Ad.			15.03			43.3	
6582	Mädl.	19	9	54.24	21	0	54.2	
	Arm.			54.20			54.3	
	Yarn.			54.18$_2$			53.7	
	Q.			- -			53.3$_2$	
	Kbg.			54.22$_2$			56.0$_2$	
	Ay. 64			54.12			53.9	
	Main			54.33			55.8	
	Wn. 67			54.25$_2$			54.2$_2$	
	Ad.			54.22			54.4	
6589	Mädl.	19	10	50.55	21	10	17.1	
	Arm.			[50.41$_1$]			16.7$_2$	
	Yarn.			50.56$_2$			15.6	
	Ay. 60			50.63			15.3	
	Kbg.			50.66$_2$			14.8$_2$	
	Ay. 72			50.65			16.5	
	Ay. 73			50.65$_2$			16.0	
	Ad.			50.61			15.8	
6602	Yarn.	19	12	26.17	22	48	6.6$_2$	Smyth has weight 1½ in decl.
	Q.			26.26$_2$			5.9$_1$	
	Smyth			26.34			5.6	
	Main			26.26			6.4	
	Ad.			26.26			6.0	
6637	Mädl.	19	17	43.76	26	1	24.6	Ay. 72 (21 obs. in decl.) has weight = 1½.
	Arm.			43.65			26.5	
	Kbg.			43.67			26.0	
	Ay. 64			43.70			26.0	
	Main			43.77			26.5	
	Ay. 72			43.68			25.8	
	Ay. 73			43.73$_1$			25.2	
	Ad.			43.71			26.0	
6648	Mädl.	19	19	11.90	29	22	41.9	
	Hend.			- -			41.4	
	Ay. 40–45			11.90			41.0	
	Arm.			12.00			41.5	
	Yarn.			11.74$_3$			40.6	
	Kbg.			11.81$_2$			43.0$_2$	
	Ad.			11.88			41.5	
6652	Mädl.	19	19	[56.43]	20	1	37.5	There is some error in Mädler's A. R. I assume P. M. = 0. Bradley has no decl.
	Arm.			55.68			35.2$_2$	
	Jac.			55.58			36.3	
	R. C.$_2$			55.39			36.0	
	Ay. 64			55.60			35.6	
	Ad.			55.56			35.8	

No.	Authority.	Right ascension.			Declination.			Remarks.
		h.	*m.*	*s.*	°	′	″	
6657	Mädl.	19	20	15.49	24	41	19.6	
	Arm.			15.58			20.0	
	Q.			15.39			17.6	
	Kbg.			15.32			17.7	
	R. C.$_2$			15.39			16.3	
	Ay. 64			15.42			18.3	
	Ay. 71–73			15.39			17.4	
	Ad.			15.43			17.9	
6673	Mädl.	19	23	16.99	29	11	9.0	There is probably a misprint in Mädler's declination; it should read 29° 8′ 52″.45, and 29° 11′ 49″.0 when reduced to 1875.
	Arm.			17.09			48.6	
	Yarn.			16.98$_2$			47.2	
	Kbg.			16.98$_2$			46.5$_2$	
	Q.			17.01$_1$			47.4$_2$	
	Ay. 64			17.07			47.6	
	Main			17.06			49.0	
	Wn. 67			16.98			47.4	
	Ad.			17.02			47.8	
6674	Mädl.	19	23	30.22	24	24	48.6	Double weight to Ay. 60, 64, 70; Main 70.
	Arm.			30.12			48.1	
	R. C.$_2$			30.20			47.0	
	Ay. 60			30.25			47.0	
	Q.			30.27$_2$			46.2	
	Ay. 64			30.24			47.2	
	Main 65			30.25			47.7	
	Main 70			30.26			48.1	
	Ay. 70			30.23			47.5	
	Ad.			30.23			47.4	
6676	Mädl.	19	23	44.02	24	30	44.7	
	Arm.			44.12			44.3	
	Bonn.			44.25$_1$			44.6$_1$	
	R. C$_2$.			43.99			43.8	
	Q.			44.06$_2$			42.4$_1$	
	Ay. 64			44.09			43.3	
	Ad.			44.06			43.7	
6678	Mädl.	19	23	53.73	20	1	28.1	
	Ay. 64						24.4	
	Q.						25.4$_1$	
	Main			53.76			24.3	
	Ad.			53.72			24.6	
6690	St.	19	25	40.84	27	41	54.4	Weights in A. R., 5, 1, 1½, 1, 1½, 1; in decl., 5, 1, 1, 1, 2, 1½, 1½.
	Kbg.			40.83			55.3	
	Yarn.			40.82			55.3	
	R. C.$_2$			40.71			54.0	
	Leid.						54.3	
	Ay. 70			40.83			54.1	
	Main			40.75			54.3	
	Ad.			40.81			54.4	
6691	Ad.	19	25	43.02	27	42	13.7	By diff. of A. R. and decl. from preceding.
6695	Hend.	19	26	36.36	20	39	55.5	Weight of Main, 1½. P. M. very small by Piazzi, and assumed = 0.
	Arm.			36.27			54.0	
	Q.			36.17$_1$			52.2$_1$	
	Main			36.30			54.0	
	Ad.			36.29			54.2	
6714	Mädl.	19	29	[52.97]	29	11	21.6	Weight of Main, 1½. The P. M. has been assumed = 0. Piazzi agrees exactly in decl. with the adopted value. Br. has no decl.
	Arm.			52.72			22.2	
	Yarn.			52.84$_2$			20.3	
	Q.			52.82$_2$			20.9$_2$	
	Kbg.			52.80$_2$			23.4$_2$	
	Ay. 64			52.89			20.3	
	Main			52.99			21.4	
	Ad.			52.84			21.4	

No.	Authority.	Right ascension.	Declination.	Remarks.
		h. *m.* *s.*	° ′ ″	
6740	Mädl.	19 34 26.35	29 51 59.1	Weight in decl. of Ay. 50 and Ay. 72, 1½ each.
	Arm.	26.29	58.7	
	Ay. 50	26.40	59.9	
	Yarn.	26.30$_2$	58.8	
	Ay. 72	26.30	58.7	
	Ay. 73	. .	59.2	
	Wn. 73	26.23	59.5	
	Ad.	26.31	59.2	
6758	Mädl.	19 38 31.12	25 28 26.3	
	Arm.	31.18	26.5	
	Main	31.03	26.4	
	Ay. 64	31.07	26.7	
	Ay. 72	31.11	26.6	
	Ay. 73	. .	26.6	
	Ad.	31.10	26.6	
6762	Mädl.	19 38 48.47	26 50 15.8	
	Arm.	48.56	15.7	
	Smyth	48.67	15.5	
	Kbg.	48.72$_1$	16.9$_1$	
	Ay. 64	48.70	14.7	
	Wn. 67	48.69	15.3	
	Main	48.63	15.8	
	Ad.	48.63	15.5	
6810	Mädl.	19 45 [40.71]	22 17 37.4	Mädler's P. M. seems erroneous in A. R.
	Arm.	[40.93]	37.2	
	Main	41.00	37.0	
	Ay. 64	41.12	37.0	
	Ay. 72	41.16$_1$	36.8	
	Ad.	41.08	37.0	
6827	Mädl.	19 48 8.95	23 45 18.3	
	Arm.	8.72	16.3	
	Ay. 60	8.89	17.0$_3$	
	Wn. 67	8.87	17.9	
	Ay. 73	8.89$_1$	16.9	
	Ad.	8.86	17.0	
6835	Mädl.	19 49 12.87	23 59 34.1	
	Arm.	12.84$_2$	35.3	
	Q.	12.77$_2$	33.6$_2$	
	Ay. 64	12.88	34.4	
	Main	12.88	35.0	
	Ad.	12.85	34.6	
6866	Mädl.	19 53 48.76	22 45 43.5	
	Arm.	48.70	. .	
	Hend.	. .	45.8	
	Ay. 60	48.71$_2$	44.4	
	Q.	48.64	43.6$_1$	
	Ay. 72	48.85$_1$	44.8	
	Ad.	48.72	44.8	
6879	Mädl.	19 55 57.13	27 24 35.2	
	Arm.	57.08	33.7	
	Ay. 60	57.16	33.8	
	Q.	57.05$_1$	32.9$_1$	
	Kbg.	57.07$_2$	32.9$_2$	
	Yarn.	57.08$_1$	36.1$_2$	
	Ay. 72	57.21$_1$	32.7	
	Ad.	57.11	33.7	
6882	Mädl.	19 56 26.90	24 27 18.4	
	Arm.	26.88	18.4	
	Yarn.	26.95	16.4	
	Ay. 60	26.94	17.1	
	Q.	26.84	16.7$_2$	
	Ad.	26.90	17.2	

No.	Authority.	Right ascension.			Declination.			Remarks.
		h.	*m.*	*s.*	°	′	″	
6883	Mädl.	19	56	43.23	24	35	22.7	
	Arm.			43.13			[24.4]	
	Yarn.			43.27			20.3	
	Q.			43.11_2			20.3	
	Kbg.			43.32_2			21.8_2	
	Ay. 64			43.28			21.0	
	Main			43.31			20.0	
	Ad.			43.24			20.6	
6912	Mädl.	20	1	31.03	23	15	19 3	Weight of Ay. 64: in A. R., $1\frac{1}{2}$; in decl. 2; of Ay. 70 in decl., $1\frac{1}{2}$.
	Arm.			31.09			19.6	
	Yarn.			31.04_2			18.6	
	Ay. 64			31.13			19.2	
	Ay. 70			31.16_2			19.3	
	Ad.			31.09			19.2	
6927	Mädl.	20	3	16.49	21	47	[36.6]	The P. M. in decl. — 0″.15 is derived from comparison with Bessel, 1815, corrected by + 1″.56.
	Arm.			16.67			28.8	
	Ay. 64			16.56			28.3	
	Main			16.52			30.6	
	Ad.			16.56			29.3	
6933	Mädl.	20	4	25.74	20	32	42.3	
	Arm.			25.74			42.8	
	Kbg.			25.72_2			41.1_2	
	Main			25.60			41.4	
	Ay. 64			25.64			41.6_2	
	Wn. 72			25.65			41.1	
	Ad.			25.68			41.6	
6940	Mädl.	20	5	20.29	26	32	7.6	
	Hend.			. .			5.6	
	Arm.			20.31			6.7	
	Q.			20.42_1			3.8_2	
	Ay. 60			. .			5.2_2	
	Ay. 64			20.46			4.6	
	Yarn.			20.44_2			5.3_2	
	Ad.			20.38			5.1	
6941	Mädl.	20	5	33.30	20	45	57.1	
	Arm.			33.44			49.7	
	Yarn.			33.32_2			49.7	
	R. C.$_2$			33.43_2			48.7	
	Ay. 64			33.39			48.9	
	Smyth			33.40			49.5	
	Q.			33.30_2			49.4_2	
	Ad.			33.37			49.3	
6943	Mädl.	20	6	34.61	26	26	13.9	
	Arm.			34.52			13.3	
	Q.			34.53_1			11.7_1	
	Ay. 72			34.53_2			13.2_2	
	Yarn.			34.41_2			15.6_2	
	Wn. 73			34.58			13.7	
	Ad.			34.54			13.6	
6944	Mädl.	20	6	46.26	26	6	24.6	
	Arm.			46.25			25.5	
	Bonn.			46.31_1			24.0_1	
	Kbg.			46.22_2			24.5_2	
	Ay. 64			46.19			23.6	
	Main			46.24			25.0	
	Ay. 68			46.17_2			24.6_2	
	Ad.			46.23			24.6	
6957	Mädl.	20	9	6.48	28	19	2.2	
	Arm.			$[5.83_2]$			2.4	
	Q.			6.32_2			0.9_1	
	Ay. 64			6.37			1.6	
	Main			6.53_1			3.3	
	Ay. 72			6.39_1			2.1	
	Ad.			6.41			2.2	

No.	Authority.	Right ascension.			Declination.			Remarks.
		h.	*m.*	*s.*	°	′	″	
6966	Ay. 60	20	9	58.01$_2$	25	12	41.4	I have assumed no P. M. Lalande gives 58^s.20 and 43″.2; the latter with systematic correction.
	Bonn.			58.10			42.0	
	Smyth			58.09			40.3	
	Kbg.			58.01$_1$			43.5$_1$	
	Q.			58.04$_2$			41.3$_1$	
	Ad.			58.06			41.5	
6968	Mädl.	20	10	6.25	23	7	41.3	
	Hend.			6.25			41.1	
	Ay. 64			6.26			40.2	
	Main			6.28			41.1	
	Ad.			6.26			40.8	
6973	Mädl.	20	10	35.40	27	25	55.6	
	Arm.			35.16			55.6	
	Yarn.			35.28$_2$			54.1	
	Ay. 60			35.36$_2$			54.4	
	Ay. 64			35.34			55.2	
	Ay. 73			. .			54.9	
	Ad.			35.33			54.8	
6975	Mädl.	20	10	[50.40]	21	12	58.1	
	Hend.			50.25			59.7	
	Arm.			50.20$_1$		13	0.3$_1$	
	Ay. 64			50.20		12	59.6	
	Main			50.31$_2$		13	0.5	
	Ad.			50.24		12	59.9	
6978	Mädl.	20	11	15.75	27	23	32.8	Br. has no decl.; the P. M. from Pi. is less than + 0″.01, and has been omitted.
	Arm.			. .			32.1	
	Yarn.			15.56$_2$			33.3	
	Q.			. .			31.4	
	Ay. 64			15.82$_2$			32.1$_2$	
	Main.			15.72			31.9	
	Ad.			15.72			32.2	
6979	St.	20	11	26.19	24	17	14.6	
	Pulc.			26.14			13.8	
	Ad.			26.17			14.2	
7013	Mädl.	20	16	41.02	24	2	57.3	
	Arm.			40.98			55.9	
	Ay. 64			40.98			54.4	
	Main			40.89			54.8	
	Yarn.			40.93$_1$			54.4$_2$	
	Ad.			40.96			54.9	
7067	Mädl.	20	24	17.31	29	57	9.5	
	Arm.			17.29			9.5	
	Ay. 60			17.33			9.0	
	Yarn.			17.29			9.4$_2$	
	Kbg.			17.16			10.7$_2$	
	Main			17.27			10.0	
	Ay. 73			17.26$_1$			8.4	
	Wn. 73			17.26			10.4	
	Ad.			17.31			9.6	
7117	Mädl.	20	30	46.90	25	27	0.5	
	Arm.			46.98			1.2	
	R. C.$_2$			46.80			0.9	
	Q.			46.91$_1$		26	59.9$_1$	
	Ay. 64			46.85			59.8	
	Wn. 67			46.99		27	0.4	
	Ad.			46.90			0.4	
7126	Mädl.	20	31	44.63	26	1	41.0	Weight of Ay. 72 in decl., 1½.
	Arm.			44.78$_1$			41.1$_2$	
	Yarn.			44.71$_2$			41.3	
	Ay. 72			44.71$_2$			41.0	
	Ay. 73			. .			40.7	
	Ad.			44.69			41.0	

No.	Authority.	Right ascension.	Declination.	Remarks.
		h. m. s.	° ′ ″	
7140	Mädl. *corrected*	20 32 56.31	20 45 48.9	Mädler included in decl.
	Arm.	56.35$_2$	49.8$_2$	
	Ay. 64	56.29	48.5	
	Main	56.36	49.5	
	Ad.	56.33	49.1	
7143	Mädl.	20 33 5.21	23 40 43.1	Weight of Ay. 40–45, 1½.
	Hend.	- -	43.1	
	Arm.	5.29	44.2	Pulcova gives 42″.8 from observations in 1844 and 1846.
	Ay. 40–45	- -	42.4	
	Kbg.	5.06$_1$	43.8$_1$	
	Ad.	5.21	43.2	
7152	Hend.	20 33 50.85	29 53 51.5	P. M. used (in decl.) — 0″.06 from Piazzi; Lalande agrees nearly. The P. M. in A. R. must be very small.
	Arm.	50.89$_1$	51.9$_1$	
	Q.	- -	50.6$_1$	
	Wn. 67	50.86	50.9	
	Main	50.72$_2$	52.5	
	Ad.	50.83	51.5	
7188	Mädl.	20 39 28.05	24 49 29.2	
	Arm.	27.95	27.6	
	Yarn.	27.86	27.7	
	R. C.$_2$	27.90	27.3	
	Q.	27.90$_2$	26.4$_2$	
	Ay. 64	27.91	27.3	
	Ay. 72	28.03$_1$	27.9	
	Ay. 73	- -	26.6$_2$	
	Ad.	27.95	27.4	
7246	Mädl.	20 46 46.69	26 37 49.3	2 obs. Kbg. gives 46ˢ.64, 51″.7. The decl. has been excluded.
	Hend.	- -	47.3	
	Arm.	46.64	49.6	
	Yarn.	46.73$_1$	46.5$_2$	
	Ay. 72	46.64$_1$	48.0$_2$	
	Ay. 73	- -	46.9	
	Ad.	46.67	47.7	
7256	St.	20 49 13.96	27 34 59.4	Most authorities receive double weight.
	Eng.	13.93	60.0	
	Main 65	13.93	59.7	
	Leid.	- -	59.7	
	Main 70	13.96	60.0	
	Ay. 70	13.97	59.6	
	Pulc.	14.01	59.1	
	Wn. 73	14.00	60.2	
	Ad.	13.97	59.6	
7275	Mädl.	20 52 41.20	21 50 39.9	
	Hend.	- -	37.8	
	Arm.	41.14	38.1$_2$	
	Kbg.	41.00$_2$	37.3$_2$	
	Main	41.09	35.8	
	Ay. 64	41.00	36.6	
	Ay. 72	41.04	37.0	
	Ay. 73	- -	36.8	
	Ad.	41.07	37.0	
7354	Q.	21 4 53.02$_2$	21 56 55.0$_1$	
	Ay. 64	53.09	55.9	
	Smyth	53.15	- -	
	Main	53.15$_2$	57.8	
	Ad.	53.11	56.5	
7356	Mädl.	21 4 54.19	21 56 50.8	Bradley has no decl. The P. M. by Bessel, 1815, and Str., 1823, is less than — 0″.01, and has been omitted.
	Q.	54.17$_2$	46.3$_1$	
	Ay. 64	54.15	47.0	
	Main	54.25	48.0	
	Smyth	54.27	47.6	
	Ad.	54.21	47.4	

No.	Authority.	Right ascension.			Declination.			Remarks.
		h.	*m.*	*s.*	°	′	″	
7361	Mädl.	21	6	18.68	22	34	11.7	The P. M. used (— 0″.04) was obtained by comparison with Piazzi. Br. has no decl.
	Tayl.			- -			13.8_2	
	Arm.			18.68			15.2	
	Ay. 64			18.64			14.0	
	Ad.			18.67			14.4	
7368	St.	21	7	37.07	29	42	54.6	
	Yarn.			36.99			53.9	
	R. $C._2$			36.99			53.3	
	Ay. 64			37.01			54.2	
	Main 65			37.01			54.3	
	Arg.			36.99			54.8	
	Eng.			37.02			55.0	
	Wn. 70			37.02			54.9	
	Main 70			37.00			54.6	
	Ay. 70			36.98			54.1	
	Ad.			37.02			54.4	
7410	Q.	21	15	25.36_2	23	19	48.5_2	P. M. $+ 0^s.009 - 0''.15$, from 2 obs. by Lalande; without it we should have $25^s.25$ and $49''.9$.
	Smyth			25.26			48.5	
	Main			25.26			48.6	
	Wn. 72			25.36			49.3	
	Wn. 73			25.23			49.2	
	Ay. 72			25.31			49.5	
	Ay. 73			25.35_2			50.0_2	
	Ad.			25.30			49.1	
7437	Hend.	21	18	- -	23	44	17.6	P. M. used in A. R., $+ 0^s.010$; in decl., 0″.00, from Piazzi and Lalande. For 1875.0, Lalande gives 21″.4; Pi. gives 15″.4.
	Arm.			20.85			17.4_2	
	Q.			20.90_1			15.9_2	
	Yarn.			20.72_1			17.2_2	
	Main			20.97			17.3	
	Ay. 71			20.94			16.5	
	Ay. 73			20.90_1			16.6	
	Ad.			20.89			16.9	
7444	Hend.	21	19	0.89	25	38	17.4	The negative P. M. indicated in declination is hardly confirmed by Piazzi, which gives 16″.5. I have omitted to consider it.
	Arm.			0.93			16.6	
	Ay. 60			- -			14.9_2	
	Kbg.			0.91_2			17.1_2	
	Q.			0.96_1			15.2_2	
	Ay. 64			0.97			15.4	
	Main			1.09			15.3	
	Wn. 73			0.96			15.3	
	Ad.			0.96			15.9	
7461	Mädl.	21	22	9.70	27	3	54.9	
	Arm.			9.65			54.3	
	R. $C._2$			9.55			53.9	
	Kbg.			9.66_2			[58.9_2]	
	Q.			9.52_2			54.9_2	
	Ay. 64			9.57			54.9	
	Ay. 71			-			54.6_2	
	Ad.			9.61			54.5	
7474	Mädl.	21	24	[17.38]	23	5	32.7	
	Kbg.			17.20_2			30.7_2	
	Ay. 64			17.16			30.1	
	Q.			17.12_2			30.2_2	
	Main			17.14			31.3	
	Ay. 72			17.13			31.7	
	Wn. 73			17.11			29.7	
	Ad.			17.14			30.6	
7568	Mädl.	21	38	33.04	28	10	43.9	Ay. 60, 64 and Main have wt. = 1¼ in decl.
	Arm.			33.12			43.7	
	R. $C._2$			32.99			44.5	
	Yarn.			33.07			42.7	
	Ay. 60, 64			33.16			43.1	
	Smyth			33.17_1			43.5	
	Main			33.10			43.4	
	Ad.			33.09			43.3	

No.	Authority.	Right ascension.			Declination.			Remarks.
		h.	*m.*	*s.*	°	′	″	
7569	Ad.	21	38	33.45	28	10	41.0	By differences from preceding star. Armagh gives 40″.1.
7570	C. A.	21	38	46.51	28	12	37.2	
	Tayl.			46.66$_2$			35.7	
	Q.			46.47$_2$			36.9	
	Yarn.			46.49			37.3	
	Ad.			46.53			36.8	
7571	Pulc.	21	38	58.96	25	4	16.8	Weight for Pulc., 2; for Ay. 64–72, 1½ (12 obs.) in decl.
	Q.			59.01$_2$			15.1	
	Kbg.			59.10$_2$			17.3$_2$	
	Ay. 64–72			59.04			16.8	
	Ad.			59.01			16.5	
7584	Arm.	21	40	16.60	25	0	29.7	The star is not in Mädler.
	Q.			16.50$_2$			28.4$_2$	
	R. C.$_2$			16.45			28.2	
	Yarn.			16.52$_2$			29.7	
	Ay. 64			16.52$_2$			29.8$_2$	
	Wn. 67			16.55			29.3	
	Ad.			16.53			29.2	
7585	Mädl.	21	40	[19.50]	22	22	25.2	I have used P. M. + 0^s.002 in A. R. instead of Mädler's + 0″.060 = 0^s.004.
	Arm.			19.40			26.3	
	Ay. 64			19.30			22.9	If Arm. is excluded the declination would be 23″.5.
	Main			19.26			24.1	
	Ad.			19.32			24.4	
7586	Mädl. *corrected*	21	40	42.47	24	59	8.0	Armagh gives 42^s.52 and 10″.4; declination rejected.
	Q.			42.47$_2$			6.0$_2$	
	R. C.$_2$			42.66$_2$			4.8	
	Ay. 64			42.50			8.5	
	Wn. 67			42.49			7.5	
	Ad.			42.52			7.0	
7607	Mädl.	21	44	18.87	29	35	35.8	
	Arm.			18.86			35.3	
	Ay. 60			18.91			34.3	
	Kbg.			18.88$_2$			34.9$_2$	
	Ad.			18.88			34.8	
7623	Mädl. *corrected*	21	46	55.16	28	12	33.4	
	Arm.			55.17			33.7	
	Yarn.			55.06			32.9	
	Kbg.			55.09$_2$			35.4$_2$	
	Ad.			55.12			33.7	
7627	St.	21	47	22.49	25	20	15.8	Wn. 73 has a single weight.
	Yarn.			22.48			15.3	
	Main 65			22.46			15.7	
	Eng.			22.51			16.1	
	Main 70			22.49			16.5	
	Leid.			. .			16.2	
	Ay. 70			22.50			16.0	
	Pulc.			22.51			15.5	
	Wn. 73			22.57			15.7	
	Ad.			22.49			15.9	
7693	Mädl.	21	59	[54.63]	28	21	29.4	
	Hend.			. .			27.7	
	Arm.			54.90$_2$			27.8	
	Ay. 64			54.94			26.1	
	Main			54.88			27.1	
	Ay. 72			. .			26.6	
	Ay. 73			54.91$_2$			26.4	
	Ad.			54.91			26.9	
7706	St.	22	1	11.52	24	44	7.4	Most authorities have weight 1½.
	Ay. 64			11.55			6.8	
	Main 65			11.44			6.8	
	Main 70			11.57			8.2	
	Yarn.			11.58$_2$			6.1$_2$	
	Ay. 70			11.56			7.1	
	Ay. 73			11.55$_2$			7.4$_2$	
	Ad.			11.54			7.2	

No.	Authority.	Right ascension.			Declination.			Remarks.
		h.	*m.*	*s.*	°	′	″	
7712	Mädl.	22	1	58.29	21	5	44.6	Main has weight 1½ in decl. (9 obs.).
	Arm.			58.11$_2$			41.8$_2$	
	Kbg.			58.08$_1$			43.9$_1$	
	Ay. 64			58.13			42.2	
	Main			58.14			43.1	
	Ad.			58.16			42.7	
7733	Mädl. *corrected*	22	4	35.83	20	21	53.5	Mädler included in final declination.
	Arm.			35.75$_2$			52.9	
	Ay. 64			35.73			51.8	
	Main			35.70			51.6	
	Ad.			35.75			52.4	
7757	Tayl.	22	7	55.27	27	59	20.3	P. M. used + 0^s.005 — 0″.04 (chiefly from Piazzi).
	Arm.			[55.09]			23.2	
	Q.			54.95$_1$			20.1$_1$	
	Kbg.			54.94$_2$			22.1$_2$	
	Main			55.06$_2$			22.8	
	Ad.			55.08			22.0	
7798	Mädl.	22	15	33.19	27	42	4.0	Mädler's P. M. in A. R. and his A. R. has been omitted. Weight of Ay. 64, 2; of Ay. 70, 1½.
	Arm.			33.17			6.5	
	Yarn.			33.06			4.5	
	Ay. 64			33.08			5.2	
	Wn. 67			33.07			4.2	
	Ay. 70			32.94			5.4	
	Ad.			33.06			5.3	
7807	Mädl.	22	17	38.77	20	13	2.2	
	Arm.			38.80			2.5	
	Q.			38.63			2.0	
	R. C.$_2$			38.65			2.2	
	Yarn.			38.66			2.0	
	Ay. 64			38.69			1.5	
	Ay. 72			38.71$_2$			1.4$_2$	
	Ad.			38.70			2.0	
7914	Mädl.	22	35	53.49	28	39	20.5	
	Arm.			53.50			20.5	
	Yarn.			53.44$_1$			19.2	
	Ay. 60			53.42			20.0	
	Kbg.			53.26$_1$			[23.4$_1$]	
	Ay. 71						20.7	
	Ay. 73						20.7$_2$	
	Ad.			53.44			20.1	
7923	St.	22	37	8.68	29	34	4.8	Weight of R. C.$_2$, Main, Ay. 72–73, 1½ each; of St., 5.
	R. C.$_2$			8.70			5.7	
	Yarn.			8.63$_2$			3.6	
	Kbg.			8.68			5.3	
	Main			8.55			4.9	
	Ay. 72–73			8.66			4.7	
	Ad.			8.65			4.8	
7945	St.	22	40	30.65	22	54	30.2	Weight of St. and Leid., 2 each; of Ay. 70 (14 obs.), 1½.
	Yarn.			30.58			29.9$_2$	
	Ay. 70			30.67			29.6	
	Leid.						30.2	
	Ad.			30.64			30.0	
7958	St.	22	43	58.26	23	56	31.1	The P. M. of St., instead of — 0^s.0013 — 0″.026, should be + 0^s.0110 — 0″.050. It seems to be an error of copying from Br. 3013 = τ^2 Aquarii (Mädler, p. 62). Weights of Ay. 64 and 70, 2; of Main 65 and 70, 1½ each.
	R. C.$_2$			58.22			31.3	
	Yarn.			58.10			31.0$_2$	
	Ay. 64			58.26			31.6	
	Main 65			58.18			30.7	
	Main 70			58.31			31.7	
	Ay. 70			58.26			31.5	
	Ad.			58.24			31.3	

No.	Authority.	Right ascension.			Declination.			Remarks.
		h.	*m.*	*s.*	°	′	″	
7997	Mädl.	22	51	19.69	20	5	58.0	
	Arm.			19.64			57.1	
	R. $C._2$			19.52			57.2	
	Q.			19.53_2			56.1_2	
	Ay. 64			19.60_2			56.3_2	
	Ay. 72			19.62_1			56.5	
	Ad.			19.61			56.7	
8032	St.	22	57	42.95	27	24	18.7	Weight of St., 5.
	Yarn.			42.89			20.0	
	Ay. 72			42.84_1			18.3	
	Wn. 72–73			42.86			18.0	
	Ad.			42.92			18.6	
8052	Mädl.	23	1	1.66	24	47	39.8	Weights of Ay. 64 and 70, $1\frac{1}{2}$.
	Arm.			1.70_3			38.1	
	Ay. 60			1.54			38.1	
	Ay. 64			1.48			38.1	
	Yarn.			1.50_2			39.8_2	
	Ay. 70			1.50			38.4	
	Ad.			1.56			38.4	
8079	Mädl.	23	5	45.11	26	10	22.1	
	Arm.			45.06			21.8	
	Yarn.			45.18			20.9	
	Q.			45.13			19.8	
	R. $C._2$			45.20			20.0	
	Ay. 64			45.24			21.3	
	Ay. 71			45.29			21.0	
	Ay. 73			45.24			20.7	
	Ad.			45.18			20.8	
8091	Mädl.	23	8	51.88	27	23	35.7	Mädler has but one (Lalande) declination. The P. M. indicated is not confirmed by Bessel's zones.
	Arm.			51.72			26.8	
	Yarn.			51.67_2			20.8	
	Smyth			51.88			25.4	
	Main			51.87_2			27.2	
	Ay. 64			51.78			25.9	
	Ad.			51.80			26.4	
8097	Mädl.	23	9	40.14	27	34	0.5	
	Arm.			40.05_2			1.5	
	Q.			40.10_2			0.5_2	
	Ay. 64			40.09			0.2	
	Main			40.03			0.9	
	Ay. 72			40.06_2			0.2	
	Ay. 73			- -			0.2_2	
	Wn. 73			40.12			1.7	
	Ad.			40.09			0.7	
8099	Tayl.	23	9	57.73_1	27	32	42.2_1	Piazzi and Lalande indicate a *negative* P. M. in decl. I have assumed zero.
	R.			57.50_1			43.7_1	
	Q.			57.77_2			45.4_1	
	Main			57.66_1			46.3_1	
	Ad.			57.68			44.4	
8131	St.	23	14	27.11	23	3	22.9	
	Pulc.			27.09			23.0	
	Ay. 72			27.06			22.5	
	Ad.			27.09			22.9	
8133	Mädl.	23	14	42.19	29	43	60.9	
	Arm.			- -			60.8	
	Kbg.			42.44_1			57.3_1	
	Ay. 64			42.31_2			58.5_2	
	Main			42.36_2			59.0_2	
	Ad.			42.30			59.0	
8146	Mädl.	23	16	27.20	20	8	40.1	
	Arm.			27.20			40.1_2	
	R. $C._2$			27.04			37.6_2	
	Kbg.			27.29_1			40.8_1	
	Ay. 64			27.07			38.5	
	Ad.			27.10			39.1	

No.	Authority.	Right ascension.			Declination.			Remarks.
		h.	*m.*	*s.*	°	′	″	
8160	St.	23	19	8.53	22	42	58.2	
	Yarn.			8.49			58.1	
	Kbg.			8.47$_2$			59.3$_2$	
	Q.						56.9$_2$	
	Ay. 72			8.55$_1$			57.7	
	Ay. 73						57.8	
	Pulc.			8.52			58.2	
	Ad.			8.52			58.1	
8174	Mädl.	23	21	27.71	24	28	51.8	
	Arm.			27.66			51.4	
	Ay. 64			27.82			50.8	
	Q.			27.84$_2$			50.2$_2$	
	Main			27.81$_2$			51.1	
	Yarn.			27.88			52.4$_2$	
	Ad.			27.78			51.2	
8203	Mädl.	23	27	12.78	21	48	33.0	The declinations from Ay. (34 and 25 obs.) have double weight.
	Yarn.			12.65			33.5	
	Kbg.			12.66$_1$			34.2$_2$	
	Q.			12.60			31.2$_2$	
	Ay. 64			12.64			32.6	
	Yarn.			12.76			32.4$_2$	
	Ay. 70			12.88			32.3	
	Ad.			12.73			32.7	
8256	Mädl.	23	37	42.49	28	40	9.9	Weight of Ay. 72, 1½.
	Arm.			42.38			9.2	
	R. C.$_2$			42.38			8.4	
	Ay. 60			42.43			9.9	
	Ay. 72			42.33			9.7	
	Ad.			42.40			9.3	
8284	Mädl.	23	43	20.02	28	8	50.0	Main (15 obs. in decl.) has weight = 1½.
	Arm.			19.88			48.6	
	Q.			20.06$_2$			48.2$_2$	
	Ay. 64			19.97			47.9	
	Main 70			19.95			48.7	
	Ay. 72			19.95$_2$			47.7	
	Ad.			19.97			48.3	
8296	Mädl.	23	46	2.86	20	58	34.9	
	Arm.			2.77			33.6	
	Ay. 64			2.79			32.5	
	Main			2.74			33.8	
	Ad.			2.79			33.3	
8301	Mädl.	23	46	19.09	21	2	51.0	
	Arm.			19.14			53.8$_1$	
	Kbg.			19.11$_1$			52.0$_1$	
	Ay. 64			19.15			52.8	
	Main			[19.66$_1$]			54.6$_2$	
	Ad.			19.12			53.3	
8324	Mädl.	23	51	23.62	24	26	48.4	Ay. has double weight each time; Main, 1½; in declination only.
	Arm.			23.55			47.6	
	Yarn.			23.54$_2$			47.1	
	Q.			23.49			46.7$_2$	
	Ay. 64			23.47			48.0	
	Main			23.48			47.6	
	Ay. 70			23.44			48.2	
	Ad.			23.51			47.7	
8337	Mädl.	23	54	0.42	26	13	26.0	
	Arm.			0.18			27.2	
	Q.			0.20			27.4	
	Main			0.36			26.5	
	Ay. 73			0.29$_2$			25.7$_2$	
	Ad.			0.29			26.8	

No.	Authority.	Right ascension.			Declination.			Remarks.
		h.	*m.*	*s.*	°	′	″	
8350	Mädl.	23	55	38.87	26	25	15.8	Q. and Smyth have weight, 1½; the latter in declination only.
	R. C.$_2$			38.52			11.1	
	Arm.			38.58$_2$			13.0$_2$	
	Q.			38.61			14.8	
	Smyth			38.71			14.3	
	Ay. 64			38.62			13.7	
	Ay. 73			38.63			14.1	
	Ad.			38.65			13.7	
8374	Mädl.	0	0	7.49	28	19	53.8	Weights of Q. and Ay. 64, 1½.
	Arm.			7.58			55.3	
	R. C.$_2$			7.61			53.4	
	Ay. 60			. .			54.9$_2$	
	Q.			7.50$_{12}$			54.2	
	Kbg.			7.48$_2$			55.4$_2$	
	Ay. 64			7.63$_{10}$			53.6	
	Ay. 70			7.62			54.2$_6$	
	Yarn.			7.29$_1$			54.7$_2$	
	Ad.			7.55			54.3	
4	St.	0	1	55.73	28	24	1.1	
	Yarn.			55.73			1.1	
	R. C.$_2$			55.67			1.1	
	Ay. 64			55.71			1.0	
	Gyld.			. .			0.9	
	Main 65			55.66			0.9	
	Main 70			55.72			1.0	
	Wn. 70						.	
	Leid.			.			1.3	
	Ay. 70			55.72			1.0	
	Ad.			55.71			1.1	
109	Mädl.	0	23	[32.06]	29	3	43.8	Mädler's A. R. and his P. M. in A. R. omitted.
	Arm.			31.66			42.2	
	Yarn.			31.64			43.4	Ay. 64 has weight 2 in decl.; Ay. 70 weight, 1½.
	Ay. 64			31.77			44.2	
	Main			31.66			43.8	
	Ay. 70			31.77			43.5	
	Ad.			31.70			43.5	
164	St.	0	31	57.21	28	37	57.9	Weight to Main 65 and Main 70, 1½.
	Arm.			57.22			58.7$_2$	
	R. C.$_2$			57.25			58.7	
	Q.			. .			57.0$_8$	
	Kbg.			57.23			59.5	
	Main 65			57.17			57.9	
	Main 70			57.18			58.2	
	Yarn.			57.12			57.2	
	Ay. 70–73			57.20			58.0	
	Ad.			57.20			58.1	
168	Mädl.	0	32	51.66	20	34	33.7	
	Arm.			51.57			34.0	
	R. C.$_2$			51.67			31.4	
	Ay. 64			51.66			32.9	
	Main			51.70			32.1	
	Ad.			51.65			32.6	
170	Mädl.	0	33	20.86	20	45	8.7	
	Arm.			20.83			8.2	
	R. C.$_2$			20.75$_2$			8.0	
	Yarn.			20.96$_2$			9.4$_2$	
	Ay. 64			20.84			8.0	
	Main			20.96$_2$			8.6	
	Ad.			20.86			8.4	
178	Tayl.	0	34	58.44$_1$	23	56	37.2	Piazzi and Ll. indicate no P. M. in decl.; the A. R. is rather uncertain.
	Arm.			58.19			36.2	
	R. C.$_2$			58.23			36.4	
	Ay. 64			58.25			36.4	
	Ay. 72			58.28			35.2	
	Ad.			58.26			36.3	

No.	Authority.	Right ascension.	Declination.	Remarks.
		h. *m.* *s.*	° ′ ″	
215	St.	0 40 42.95	23 35 12.8	
	Arm.	42.96	12.6	
	Yarn.	42.90_2	11.8_2	
	Q.	42.87_2	13.6_2	
	Ay. 72	42.91	12.4	
	Ad.	42.93	12.7	
217	Mädl.	0 41 17.02	20 14 29.5	
	Arm.	17.08_2	32.0	
	R. $C._2$	17.22	31.1	
	Ay. 64	17.13	31.5	
	Yarn.	17.15_2	30.8	
	Ad.	17.12	31.4	
224	Hend.	0 42 27.43	28 2 15.9	Lalande agrees very nearly without P. M.
	Jac.	[27.08]	14.7	
	Yarn.	27.55_2	16.4_2	
	Q.	27.65_2	15.1_1	
	Main	27.62	16.7	
	Smyth	27.58	16.0	
	Ad.	27.56	15.8	
229	Mädl.	0 43 10.26	27 1 46.5	Mädler's and the Armagh A. R. refer to the preceding star, most probably. The position here given refers to the middle point between the stars.
	Arm.	10.16	45.5	
	R. $C._2$	10.52	44.1	
	Ay. 64	10.58	44.8	
	Yarn.	10.48	45.6	
	Main	10.47	46.1	
	Ad.	10.51	45.2	
250	Mädl.	0 48 16.50	22 57 3.2	
	Arm.	16.54	$[5.5_1]$	
	R. $C._2$	16.65	2.6	
	Ay. 64	16.58	3.2	
	Main	16.66	3.3	
	Ay. 72	16.64	3.0	
	Ad.	16.60	3.0	
256	Mädl.	0 49 15.35	26 31 52.9	
	Arm.	15.46	52.7	
	Main	15.40	52.6	
	Wn. 67	15.27	52.0	
	Ay. 73	15.28	52.5	
	Ad.	15.35	52.4	
263	Jacob.	0 50 31.00	26 19 20.6	Lalande indicates a P. M. in decl. of about $-0''.06$, which is contradicted by Jacob. I have used zero.
	Yarn.	31.24_2	21.9	
	Q.	31.24_2	21.0_2	
	Ay. 64	31.22	21.7	
	Smyth	31.37_1	22.5	
	Wn. 67	31.23	21.9	
	Ad.	31.23	21.6	
264	Mädl.	0 50 32.20	22 44 33.3	
	Arm.	32.09	33.8_2	
	Ay. 60	32.09	32.0	
	Yarn.	32.04	30.9_2	
	Ay. 72	32.04	31.8	
	Ad.	32.09	32.1	
267	Mädl.	0 51 [4.26]	28 18 57.3	A. R. rather insecure.
	Arm.	[4.23]	56.4	
	Ay. 64	4.37	57.5	
	Main.	4.40	55.8	
	Ad. 72	4.47	57.9	
	Ad.	4.41	56.9	
299	Hend.	0 57 38.03	28 59 28.0	The P. M. assumed $+0^s.014 - 0''.12$ from Lalande is confirmed by the modern observations.
	Jacob.	[37.77]	29.0	
	Arm.	38.25	29.1	
	Q.	38.00_1	28.5	
	Main	38.04	28.5	
	Smyth		28.5	
	Ad.	38.09	28.6	

No.	Authority.	Right ascension.	Declination.	Remarks.
		h. *m.* *s.*	° ′ ″	
307	Mädl.	0 58 59.03	20 48 12.6	
	Arm.	58.95	12.9	
	R. C.$_2$	58.96$_2$	10.8	
	Ay. 64	58.87	11.6	
	Main	59.13	13.1	
	Ad.	58.99	12.1	
308	Mädl.	0 58 59.69	20 47 44.1	
	Arm.	59.85	[40.5]	
	R. C.$_2$	59.83$_3$	43.8	
	Ay. 64	59.64	43.9	
	Main	59.68	43.4$_1$	
	Ad.	59.73	43.7	
348	Mädl. *corrected*	1 4 44.30	20 22 10.2	Pulcova gives 10″.8 as reduced after the ms. was completed.
	Ay. 60	44.18	10.7	
	Yarn.	44.16	10.0$_2$	
	Ad.	44.21	10.4	
349	St.	1 4 [46.87]	29 25 31.7	The position St. has been affected by the errors in Mädler's P. M. I have used + 0^s.004 in A. R. and 0″.00 [from Anwers] in decl. P. M. in decl. from Mädler confirmed by Piazzi.
	Arm.	[46.50]	32.8	
	Main	46.69	33.4	
	Ay. 64	46.80	32.9	
	Q.	46.74$_1$	31.9$_2$	
	Ay. 73	46.66$_1$	32.0$_1$	
	Ad.	46.74	32.7	
358	Mädl.	1 6 6.73	29 24 4.2	
	Arm.	6.48$_2$	4.8	
	R. C.$_2$	6.63$_2$	2.0$_2$	
	Ay. 64	6.50	4.8	
	Q.	6.51$_1$	3.5$_2$	
	Ad.	6.58	4.0	
365	Mädl.	1 6 57.77	23 55 17.0	
	Arm.	57.69$_1$	18.3	
	Ay. 64	57.83	15.6	
	Main	57.76	17.7	
	Ad.	57.77	17.2	
395	St.	1 12 35.96	26 36 23.3	
	Arm.	35.98	22.5	
	Q.	35.99$_2$	21.5$_2$	
	Main	36.02	23.0	
	Wn. 67	35.96	23.2	
	Ay. 70	35.92	21.9	
	Ad.	35.97	22.8	
401	Mädl.	1 14 12.87	28 5 4.1	
	Arm.	12.90	4.7	
	Ay. 64	12.83	2.2	
	Main	12.85	3.3	
	Ad.	12.86	3.4	
514	Mädl.	1 34 35.56	29 24 52.7	
	Arm.	35.52	50.1	
	Jacob.	[35.21]	50.8	
	R. C.$_2$	35.51	50.8$_1$	
	Kbg.	35.68	50.7$_1$	
	Ay. 64	35.54	51.3	
	Smyth	35.63	51.2	
	Q.	35.48$_1$	50.0$_1$	
	Yarn.	[35.78]	49.4	
	Ad.	35.57	50.5	
519	Tayl.	1 35 3.21	28 52 22.9	The P. M. used in decl. (— 0″.03) is from Piazzi, compared with modern observations.
	Kbg.	2.82$_1$	25.0$_1$	
	Main	2.92	23.2	
	Ad.	3.03	23.4	

No.	Authority.	Right ascension.	Declination.	Remarks.
		h. *m.* *s.*	° ′ ″	
556	Kbg.	1 43 14.26$_1$	21 39 12.8$_1$	There may be P. M. of $-0''.02$, which would change the adopted declination a very trifle.
	Q.	14.29	12.6$_1$	
	Ay. 64	14.26	13.9	
	Main	14.32	12.8	
	Wn. 67	14.37	12.9	
	Yarn.	14.41$_2$	12.9$_2$	
	Ad.	14.32	13.0	
569	St.	1 45 57.58	28 58 8.1	Ay. 73 depends on 11 obs. in decl., and has the weight 1½.
	Arm.	57.59	8.2	
	R. C.$_2$	57.55	10.7	
	Q.	57.55	7.7	
	Yarn.	57.53	6.9	
	Ay. 73	57.55	8.0	
	Ad.	57.56	8.3	
577	St.	1 47 44.23	20 11 46.1	
	R. C.$_2$	44.22	46.4	
	Ay. 64	44.22	46.0	
	Main 65	44.20	46.3	
	Arg.	44.29	46.5	
	Eng.	44.21	47.0	
	Leid.	. .	46.6	
	Ay. 70	44.22	45.6	
	Main 70	44.21	45.9	
	Ad.	44.23	46.3	
581	Mädl.	1 48 52.83	22 57 49.6	
	Arm.	52.65	49.2	
	R. C.$_2$	. .	48.3$_2$	
	Q.	52.84$_2$	49.2$_2$	
	Bonn.	53.01	49.2	
	Ay. 64	52.93	49.0	
	Wn. 67	52.95$_2$	50.2	
	Yarn.	. .	48.5	
	Ad.	52.90	49.1	
593	Mädl.	1 50 57.85	22 59 8.1	
	Arm.	57.99	6.5$_1$	
	Kbg.	58.08$_1$	7.7$_1$	
	Q.	57.88	5.9	
	Ay. 64	57.85	7.4	
	Main	57.97	7.1	
	Ay. 73	57.96	7.0	
	Ad.	57.93	6.9	
607	Tayl.	1 52 39.56	20 27 3.1	I have used P. M. $+0^s.010$ in A. R. and $0''.00$ in decl.
	Hend.	39.45	3.2	
	Arm.	39.47	3.6$_2$	
	Q.	39.48	1.0$_1$	
	R. C.$_2$	39.59	1.3	
	Yarn.	39.58	2.2	
	Ad.	39.52	2.5	
630	Mädl.	1 56 33.90	25 19 56.5	
	Arm.	33.94	54.6	
	R. C.$_2$	33.77	[49.9$_1$]	
	Ay. 64	33.82	56.2	
	Q.	33.82	54.7$_2$	
	Wn. 67	33.88	55.4	
	Ad.	33.85	55.3	
637	Mädl.	1 57 16.32	25 19 6.6	
	Arm.	16.46$_1$	6.4	
	R. C.$_2$	16.33$_2$	6.0	
	Ay. 64	16.34	7.7	
	Q.	16.21$_1$	6.3	
	Ad.	16.33	6.6	

No.	Authority.	Right ascension.	Declination.	Remarks.
		h. *m.* *s.*	° ′ ″	
644	Mädl.	1 59 [34.64]	22 3 7.5	
	Arm.	34.33$_2$	5.7	
	R. C.$_2$	34.26$_1$	3.9$_2$	
	Q. -	34.37$_2$	5.1$_2$	
	Ay. 64	34.41	5.4	
	Wn. 67	34.43	5.3	
	Ay. 73 -	34.41$_1$	4.9	
	Ad. -	34.38	5.1	
645	Mädl.	1 59 37.22	25 14 4.8	Smyth has weight = 1½. There is no large P. M., as assigned by Mädler. The earlier obs. are rather discordant.
	Hend.	- -	0.6	
	Arm.	37.46$_2$	0.0	
	Ay. 64 -	37.67	13 58.7	
	Main	37.57	59.1	
	Q. - -	37.81$_1$	59.1$_1$	
	Smyth -	37.70	59.1	
	Ad. -	37.63	59.4	
647	Mädl.	1 59 44.15	25 6 27.7	
	Arm. - -	- -	26.2	
	Ay. 64 -	44.31	25.9	
	Main	44.03	27.4	
	Smyth -	44.26$_2$	26.7$_1$	
	Q.	44.24$_1$	25.8$_1$	
	Ad.	44.19	26.4	

DETAILS OF POSITIONS—DIVISION III.

BRITISH ASSOCIATION CATALOGUE STARS.

FROM $+60°$ TO $+70°$ DECLINATION.

No.	Authority.	Right ascension.			Declination.			Remarks.
		h.	*m.*	*s.*	°	′	″	
4222	Mädl.	12	24	37.68	69	53	36.8	Ay. and Main receive weight 1½ each in decl.
	Arm.			38.00			37.7	
	R. $C._2$			37.77_2			36.6	
	Q.			37.73_2			38.4_2	
	Ay. 60						38.3	
	Ay. 64			37.51			37.9	
	Main 66						37.8	
	Ay. 69			37.59_2			38.0	
	Ay. 71			37.28			38.0	
	Main 70			37.49_1			38.2	
	Yarn. 72						39.0_2	
	Ad.			37.63			38.0	
4276	St.	12	36	5.80	63	23	58.3	
	LeV.						58.0	
	Pulc.			5.81			58.3	
	Ay. 71			5.81			59.0	
	Ad.			5.81			58.4	
4300	R.	12	41	58.18	63	27	49.0	I have corrected Jacob's decl. by +5″. Fed. and Gr. indicate a P. M. of −0″.03 in decl. I have not used it. It would give a decl. of 49″.0 for 1875.
	Arm.			58.09			50.1	
	R. C.			58.38			49.8	
	Jac.			[57.85]			50.1	
	Ay. 73			58.23			49.9	
	Ad.			58.22			49.8	
4302	Mädl.	12	42	27.26	67	28	23.4	Main's declinations have a weight 1½ each.
	Arm.			27.16_2			23.1	
	R. $C._2$			27.23			24.0	
	Q.			27.34			22.1_2	
	Ay. 64			27.18			22.4	
	Main 67						23.3	
	Main 71			27.45			22.8	
	Ay. 72			27.32_1			23.1	
	Ad.			27.28			23.0	
4305	R.	12	43	12.47	61	0	7.3	
	Arm.			12.42_1			6.6	
	R. C.			12.42			7.8	
	Jac.			[12.05]			6.9	
	LeV.						6.5	
	Q.			12.54_2			6.8	
	Ay.			12.60_2			7.4_1	
	Ad.			12.49			7.0	
4347	St.	12	50	29.70	66	7	0.3	
	Pulc.			29.63			1.1	
	Ay.			29.26			0.9	
	Ad.			29.58			0.7	
4365	Mädl.	12	55	11.68	67	16	18.2	Weights to Ay. 70 and Ay. 73 (in decl.), 1½ each.
	Arm.			11.50			17.8	
	R. $C._2$			11.64			19.1	
	Q.			11.56			17.5_1	
	Ay. 60						18.6_2	
	Ay. 64			11.47			18.5	
	Yarn.			11.40			18.4	
	Ay. 70			11.46			18.4	
	Ay. 73			11.39			19.3	
	Ad.			11.51			18.5	
4371	T.	12	56	53.60	64	16	56.8	The P. M. in decl. seems to be zero. Pi. gives 54″.3, and Gr. 55″.3, reduced to 1875.0.
	H.			53.74			54.9	
	R. C.			53.52			55.9	
	Arm.			53.50			55.8	Pulc. not included in catalogue positions; it was received later. With it A. R. = 53ˢ.59, decl. 55″.3.
	Ch.						54.5_1	
	Q.			53.65_2			54.7_2	
	Pulc.			53.61			54.5	
	Ay. 72			53.48_2			55.0_2	
	Ad.			53.58			55.6	

No.	Authority.	Right ascension.			Declination.			Remarks.
		h.	m.	s.	°	′	″	
4392	T.	13	1	26.54	62	42	44.1	The P. M. used (+ 0ˢ.005 and — 0″.06) agrees well with Pi. and Gr., and with Fed. in A. R.; but in decl. Fed. is 7″ to 8″ too far south.
	H.			26.53			44.4	
	R. C.			26.56			44.7	
	Arm.			26.36$_2$			45.2$_2$	
	R. C.$_2$			26.49			43.8	
	Q.			26.57			43.2$_2$	
	Main 65			. .			44.8	
	Main 70			26.29			44.1	
	Ad.			26.48			44.2	
4497	Arg. 136 (250 stars)	13	21	43.48	63	54	12.2	
	Ay. 72			43.41			13.3	
	Ad.			43.47			12.5	
4510	St.	13	23	51.74	60	35	29.5	
	Pulc.			51.68			30.3	
	Ay. 72			51.66			30.6	
	Ad.			51.70			30.0	
4577	T.	13	37	35.75	65	27	15.6	Piazzi's decl. is probably 10″ too far north; it gives 25″.0, and Gr. 16″.0; but I fear there is some error in the Storia Celeste.
	Ay. 40			36.12			15.8	
	Arm.			36.10			17.2	
	H. 44			36.28			15.3	
	R. C.			36.11			16.4	
	Lang.			. .			15.6	
	R. C.$_2$			36.41			14.8	
	Ay. 72			36.26			15.7	
	Ad.			36.21			15.8	
4646	St.	13	47	46.98	65	20	28.1	Ay. 72 has double weight as well as Pulc.
	Yarn.			47.02			28.0	
	Pulc.			46.91			28.3	
	Ay. 72			46.94			28.5	
	Ad.			46.96			28.2	
4689	Arm.	13	59	5.70	69	16	51.6	
	H.			5.48			50.4	
	R. C.			5.63			51.6	
	Ay. 45			. .			50.5	
	Ay. 50			5.89			50.0$_9$	
	Ay. 60			. .			50.9$_2$	
	Q.			5.70			49.8	
	Ay. 64			5.47			51.5	
	Ay. 71			5.42$_1$			51.5	
	Ad.			5.63			50.8	
4696	St.	14	1	0.35	64	58	25.5	
	Lang.			. .			25.6	
	Yarn.			0.39			25.1	
	Sm.			. .			24.9	
	Wn. 67			0.42			25.0	
	Leid.			. .			25.2	
	Main			0.32			25.2	
	Ay.			0.32			25.6	
	Pulc.			. .			25.8	
	Ad.			0.36			25.5	
4817	R. C.	14	27	48.25	63	54	19.3	The adopted P. M. is from Arg. LII (Bd. VII, p. 130); the amount is a trifle uncertain in A. R., but sure in decl.
	H.			48.28			19.7	
	Ay. 45, 50			48.12			18.0	
	Jac.			[47.52]			20.0	
	Bonn.			47.89$_1$			19.4$_1$	
	Q.			48.05$_2$			18.8$_2$	
	Pulc.			48.07			19.8	
	Ay. 72			48.01$_2$			19.9	
	Ad.			48.13			19.3	
4834	R. C.	14	30	58.28	65	56	29.9	P. M. from Fed. and Gr., which agree well.
	Ja.			[57.53]			36.1	
	Ay. 60			58.01			30.5	
	LeV.			. .			36.0	
	Q.			58.21$_2$			30.6$_2$	
	Ay. 72			58.13			30.7	
	Ad.			58.15			30.3	

No.	Authority.	Right ascension.	Declination.	Remarks.
		h. *m.* *s.*	° ′ ″	c. — o.
4874	P. M.	14 38 56.24	61 47 43.7	Compared with Fed. — 0ˢ.73 + 2″.4
	H.	56.64	43.7	Gr. + 0ˢ.35 — 0″.9
	R. C.	56.41	42.6	
	Ja.	[55.40]	[40.2]	
	Q.	56.37	42.0_2	
	Pulc. 60	[55.65_1]	43.7	
	Ay. 71	56.25_1	42.8	
	Ay. 73	56.18	43.2	
	Ad.	56.35	43.2	
4949	St.	14 55 36.30	66 25 51.4	
	Pulc.	36.09	50.7	
	Ay. 73	35.88_1	50.7	
	Ad.	36.16	50.7	
4967	R. C.	14 58 31.58	60 41 46.9	For the discussion of proper motion see Arg. (Bd. VII, star LIV).
	Bonn.	31.54	45.9	
	Ja.	[30.64]	44.8	
	Altona	31.30_1	43.6_1	
	Q.	31.72_2	46.6_1	
	Bonn.	31.33_2	47.2_2	
	Pulc. 58	31.52	46.4	
	Ad.	31.52	45.9	
4989	R. C.	15 2 3.95	66 21 18.6	
	Ja.	[3.19]	17.0	
	Ay. 60	. .	19.6_2	
	Ay. 64	4.00	19.8	
	Q.	3.96_1	20.0_2	
	Ad.	3.97	18.9	
5058	St.	15 13 12.65	67 49 18.6	
	Laug.	. .	18.0	
	Pulc.	12.62	17.8	
	Ay. 72	12.54	18.4	
	Ad.	12.62	18.2	
5091	H.	15 20 33.75	63 49 16.5	P. M. of — 0″.14 in decl. is indicated. There are no earlier observations than these. Without P. M. the P. E. of one determination would be ± 0″.80, and the decl. for 1875.0 19″.4.
	R. C.	33.54	17.4	
	Ja.	32.54	16.1	
	Yarn.	33.54	16.3	
	Q.	33.57	16.4	
	Sm. 59	33.82	17.2	
	Sm. 65–68	33.76	16.5	
	Ad.	33.65	16.6	
5115	H.	15 25 23.04	61 6 6.7	Winnecke's declination is derived from his paper on the Mars observations of 1862. With adopted P. M. in decl., c. — o.: Fed. = — 1″.6 (2 obs.); Gr. = + 0″.3.
	R. C.	22.79	8.1	
	Ja.	[22.55]	6.7	
	Winnecke 61	. .	7.5	
	Ay. 72	22.74	7.4	
	Ad.	22.86	7.3	
5116	H.	15 25 27.67	62 42 30.0	The old observations, Pi., Gr., Fed., do not agree well in either co-ordinate, but the P. M. in decl. is pretty sure. Taylor is 3″ or 4″ in error, and has been rejected.
	R. C.	27.55	29.8	
	Arm.	. .	30.3_1	
	R. C_2	27.65	29.0	
	Pulc. 61	27.60	30.4	
	Ay. 72	. .	30.4_2	
	Ad.	27.62	30.1	
5147	T.	15 29 11.14	64 37 46.8	The proper motion in A. R. is only a rude approximation; that in decl. represents the old observations, as follows: c. — o., Fed. + 4″.2; L. — 4″.0; Pi. + 0″.8; Gr. + 0″.5.
	H.	10.95	45.1	
	R. C.	11.03	46.4	
	Arm.	. .	45.3	
	Pulc. 55	11.08_2	44.5_2	
	R. C_2	10.89	44.6	
	Q.	11.01_2	45.3_1	
	Ay. 71	. .	45.7_2	
	Ad.	11.00	45.6	

No.	Authority.	Right ascension.	Declination.	Remarks.
		h. *m.* *s.*	° ′ ″	
5249	St.	15 44 46.00	62 59 10.6	
	Laug.	. .	10.0	
	Wn. 67	45.85	10.3	
	Pulc.	45.90	10.4	
	Wn. 72	45.92	11.0	
	Ay. 72	45.86	11.0	
	Ad.	45.92	10.5	
5406	H.	16 5 59.26	68 8 22.7	Weight of Ay.'s declinations 1½ each (save Ay. 50); the same to Laugier. c. — o. in decl.: Fed. + 0″.3 (2 obs.); L. L. [— 7″.6]; Gr. — 0″.4; Pd. 0″.0.
	Ay. 45	59.08	22.6	
	R. C.	59.29	23.3	
	Ay. 50	. .	22.2_2	
	Ja.	[58.57]	20.9	
	Laug.	. .	22.1	
	Pulc. 57	59.23	22.8	
	Ay. 60	59.13	22.5	
	Yarn.	59.28_2	22.1	
	Ay. 64	59.36_2	22.1	
	Ay. 70	59.28	21.9	
	Ay. 73	59.31	22.4	
	Ad.	59.24	22.3	
5453	T.	16 13 [52.68]	66 41 12.4	The proper motion is determined from Pi. and Gr., which agree. c. — o. in decl.: Pi. 0″.0; Gr. — 0″.2.
	R. C.	52.31	12.8	
	Arm.	52.05	12.9	
	Laug.	. .	13.0	
	$R. C._2$	52.09	13.2_9	
	Q.	51.96	12.6_2	
	Ad.	52.08	12.9	
5459	Ay. 40	16 15 . .	60 3 30.2	
	H.	10.28	29.1	
	Ay. 45	10.24	31.1	
	R. C.	10.31	31.2	
	Ja.	[9.33]	30.2	
	Ay. 60	10.32	31.0	
	Wn. 72	10.34	30.3	
	Ay. 72	10.38_1	31.4_1	
	Ad.	10.31	30.5	
5509	P. M.	16 22 8.18	61 58 52.0	
	R. C.	8.13	51.0	
	Ay. 45, 50	8.14	. .	
	Ja.	[7.15]	51.5	
	Ay. 64	8.16_1	52.1_1	
	Ad.	8.15	51.6	
5512	St.	16 22 18.23	61 47 50.9	
	Laug.	. .	50.9	
	Yarn.	18.18	50.7	
	$R. C._2$	18.12	50.9	
	Ay. 64	18.13	50.8	
	Main	18.14	50.6	
	Wn. 67	18.21	51.1	
	Leid.	.	51.1	
	Main	. .	50.8	
	Ay. 70	18.08	50.7	
	Ad.	18.17	50.8	
5514	H.	16 22 6.32	69 23 54.5	I have neglected a P. M. of — 0″.02 in decl. as too precarious.
	R. C.	6.41	54.6	
	Ja.	[5.18]	54.1	
	Pulc. 60	6.37	54.7	
	Ad.	6.36	54.5	
5545	St.	16 28 14.02	69 2 18.7	
	Laug.	. .	18.2	
	Yarn.	14.05	18.3	
	Wn. 67	14.20	18.1	
	Main	14.11	18.4	
	Ay. 70	14.01	18.2	
	Ad.	14.06	18.4	

No.	Authority.	Right ascension.			Declination.			Remarks.
		h.	*m.*	*s.*	°	′	″	
5560	T.	16	30	[40.16$_2$]	61	5	8.1	The old observations do not agree in decl. Fedorenko has been rejected. c. − o.: Fed. + 7″.6; Pi. + 0″.2; Gr. − 0″.2. The A. R. is quite uncertain.
	H. 43			39.53			7.8	
	R. C.			39.80			7.8	
	Arm.			[40.52$_1$]			9.0	
	Wn. 72			39.92			7.4	
	Ay. 73			. .			8.5$_2$	
	Ad.			39.75			8.1	
5601	R. C.	16	35	39.76	63	19	27.6	c. − o.: Fed. − 1″.4; Gr. + 1″.1.
	Ja.			[39.05]			28.3	
	Ay. 71			. .			28.4$_2$	
	Ad.			39.76			28.0	
5628	Mädl.	16	40	3.34	64	49	33.3	
	Laug.			. .			33.6	
	Yarn.			3.32$_2$			33.7	
	Ay. 60			3.33			34.8	
	Ay. 64			3.45$_2$			34.4	
	LeV. 64			. .			34.2	
	Ay. 70			3.46			34.4	
	Main			3.28$_2$			33.8	
	Ad.			3.37			34.2	
5717	Ay. 40	16	52	. .	60	33	46.4	Gr. gives 47″.2 in decl., and Fed. 55″.6; the latter is probably 10″ in error. I have assumed *no* P. M.
	Ay. 45–50			19.60			46.3	
	R. C.			19.70			46.8	
	Ja.			[19.05]			46.9	
	Ch.						45.9	
	Ay. 64			. .			46.1	
	Ad.			19.65			46.4	
5728	Arg. 184 (250 stars), Ad.	16	53	31.50	62	17	56.3	Arg.'s modern authorities are R. C., Q., Bonn.
5734	T.	16	55	5.92$_1$	62	33	44.3	c. − o.: Fed. − 1″.1; Pi. − 0″.8; Gr. + 0″.4.
	R. C.			6.22			43.1	
	Arm.			. .			44.3	
	Q.			6.40$_2$			43.1$_1$	
	Ad.			6.21			43.8	
5740	Mädl.	16	55	20.74	65	19	33.0	
	Ch.			. .			33.4$_2$	
	Q.			20.73			32.7	
	R. C$_2$			20.78			32.9	
	Ay. 60			20.56			33.8	
	Main			20.46$_2$			32.6	
	Ay. 73			20.72			33.1	
	Ad.			20.67			33.1	
5745	Mädl.	16	55	48.67	65	13	45.8	
	R. C.			48.70			46.7	
	Q.			48.61			45.9	
	Ay. 73			48.48			46.0	
	Ad.			48.61			46.2	
5823	St.	17	8	25.66	65	52	7.6	
	R. C$_2$			25.74$_2$			6.4	
	Main			25.83			6.6	
	Ay. 70			25.65			6.7	
	Ad.			25.71			7.0	
5840	T.	17	11	27.89$_2$	63	1	1.9$_2$	The observations of A. R. do not agree. In decl., c. − o.: Fed. − 4″.9; L. L. + 3″.0; Pi. − 1″.2; Gr. + 0″.8.
	Arm.			28.42$_2$			2.9	
	H. 43			28.23			1.2	
	R. C.			28.19			1.5	
	Ay. 45			28.13			1.6	
	Pulc. 60			28.20			2.4	
	Q.			28.38			1.8	
	Wn. 67			28.13			2.7	
	Ay. 73			28.01$_2$			2.9	
	Ad.			28.18			2.2	

No.	Authority.	Right ascension.			Declination.			Remarks.
		h.	*m.*	*s.*	°	′	″	
5917	H.	17	24	4.50	60	9	11.1	
	R. C.			4.51			12.0	
	Ja.			[4.21]			12.5	
	Sm. 59			4.78			13.9	
	Ay. 60			. .			12.4	
	Sm. 64			4.73			11.7	
	Ay. 72			. .			12.9	
	Ad.			4.63			12.4	
5972	St.	17	32	27.90	68	12	51.9	
	Pulc.			28.02			51.8	
	Ay. 72			27.78_2			52.3	
	Main			28.12_1			51.4	
	Ad.			27.95			51.9	
5978	Arg. 191 (250 stars)	17	33	42.13	61	58	13.5	
	Ay. 72			42.00			13.5	
	Ad.			42.09			13.5	
6006	St.	17	37	41.04	68	48	55.3	
	Yarn.			41.03			55.7	
	LeV.			. .			55.8	
	Wn. 67			41.17			55.5	
	Pulc.			41.02			55.5	
	Ay.			41.11			55.5	
	Main			. .			55.8	
	Ad.			41.06			55.5	
6177	Mädl.	18	6	2.42	64	12	5.0	P. M. used + 0″.04 in decl.
	R. C.			. .			9.3	
	Q.			2.40			8.4_1	
	Ad.			2.42			9.0	
6257	Mädl.	18	17	42.49	68	41	30.6	
	H. 43			42.80			31.6	
	R. C.			42.49			31.4	
	Arm.			42.68			32.4_2	
	R. $C._2$			42.75_1			30.5_2	
	Ay. 60			42.70			31.4	
	Q.			42.68_2			32.6_1	
	Ay. 73			42.66_2			31.0_2	
	Ad.			42.64			31.5	
6272	T.	18	19	[56.14]	67	22	25.0_2	There may be P. M. in A. R., which is uncertain. Pi. gives decl. 26″.5, and Lalande 43″.1 [—15″].
	Arm.			56.37_2			27.8	
	R. C.			56.15			27.6	
	Q.			56.42			. .	
	Ay. 72			56.34_1			26.9_1	
	Ad.			56.32			27.1	
6316	Mädl.	18	25	37.36	65	29	7.9	
	Arm.			37.18			11.8	
	H.						9.6	
	R. C.			. .			9.8	
	R. $C._2$			37.34_1			9.2	
	Q.			37.58_1			9.7_1	
	LeV. 64			. .			10.1	
	Ay. 72			37.45			10.6	
	Ay. 73			37.48			10.7	
	Ad.			37.39			10.2	
6224	St.	18	13	10.57	64	21	17.6	
	Ay.			. .			17.8	
	Pulc.			10.55			17.9	
	Ad.			10.56			17.8	
6243	Mädl.	18	16	0.67	68	42	36.0	
	H. 43						37.5	
	R. C.			. .			37.4	
	Arm.			0.82			$[41.6_1]$	
	Ay. 60			0.75			37.9	
	Ay. 73			0.63			37.5	
	Ad.			0.72			37.6	

No.	Authority.	Right ascension.	Declination.	Remarks.
		h. *m.* *s.*	° ′ ″	
6373	R. C.	18 36 53.33	60 35 44.9	c. — o. in decl.: F. — 0″.6; Gr. — 0″.7.
	Arm.	53.22$_2$	44.3$_2$	
	Ja.	[52.68]	45.5	
	Ay. 73	53.27$_1$	46.8	
	Ad.	53.28	45.5	
6393	H.	18 39 50.55	62 37 30.3$_2$	c. — o. in decl.: F. — 0″.9 (2 obs.); Gr. + 0″.7.
	R. C.	50.57	31.6	
	Ja.	[50.11]	32.6	
	Pulc. 61	50.59	31.8	
	Wn. 71	50.60	30.9	
	Wn. 72	50.71$_2$	31.7	
	Ay. 72	50.56$_1$	32.6$_1$	
	Ad.	50.60	31.6	
6410	Mädl.	18 42 49.90	60 54 56.3	
	Ja.	[49.47]	57.5	
	Wn. 71	49.90$_2$	57.2$_2$	
	Wn. 72	49.92	57.3	
	Ay. 72	49.81$_2$	57.3	
	Ad.	49.88	57.3	
6508	Arm.	18 56 1.87	62 13 41.2	c. — o. in decl.: F. — 2″.7; Gr. + 0″.5; Struve + 0″.6. There are traces of a P. M. in A. R.; perhaps = + 0^s.006. It has not been used.
	R. C.	1.83	40.1	
	Ja.	[1.46]	40.4	
	Ay. 64	1.75	40.0	
	Ay. 70	1.89	39.7	
	Ay. 73	1.84	39.7	
	Ad.	1.86	40.1	
6555	R. C.	19 2 6.78	61 54 25.4	c. — o. in decl.: F. — 4″.0; Gr. + 1″.1. The P. M. in A. R. (not used) may be + 0^s.006.
	Ja.	[6.67]	24.5	
	Ay. 73	6.85	24.0	
	Ad.	6.82	24.6	
6586	Mädl.	19 9 17.44	65 46 9.6	c. — o. in decl.: Br. —1″.8; Pi. — 0″.1; Gr. + 0″.2.
	Arm.	17.55	11.2	
	Ay. 60		9.8$_2$	
	Ay. 64	17.59	10.5	
	Wn. 67	17.64	9.6	
	Ay. 71	17.41	9.8	
	Ay. 73	17.59	9.9	
	Ad.	17.54	10.1	
6612	St.	19 12 31.25	67 26 [29.1]	Owing to the considerable correction to Mädler's P. M., I have brought up the decl. of Pulc. and Ay. 60 (64), from which St. is made up.
	Pulc.		30.7	
	Lang.		29.8	
	Ay. 60		29.9	
	Ay. 64		30.0	
	Yarn.	31.30	30.8	
	Leid.		29.8	
	Wn. 67	31.38	29.8	
	Ay. 70	31.32	30.5	
	Main	31.16	29.6	
	Ad.	31.28	30.1	
6629	St.	19 15 39.66	62 58 51.0	With no P. M. in decl. we find, c. — o.: F. + 1″.7; Pi. — 2″.5; Gr. + 0″.5. The P. M. in A. R. agrees well with all three authorities.
	T.	39.39	51.6	
	R. C.	39.71	50.4	
	Q.	39.53$_2$	50.2$_1$	
	Ad.	39.57	50.9	
6662	Mädl.	19 20 1.23	65 28 25.5	Airy's declinations (and A. R. of 1860) have received double weight.
	Arm.	[1.01]	26.5	
	Ay. 60	1.34	26.4	
	Ay. 64	1.28	26.0	
	Ay. 69	1.33	26.4	
	Ay. 72	1.33	26.2	
	Ad.	1.31	26.3	

No.	Authority.	Right ascension.	Declination.	Remarks.
		h. *m.* *s.*	° ′ ″	
6735	R. C.	19 32 35.81	69 26 55.9	In computing the proper motion of this star I have allowed for its secular change. Weights in declination, 12 yr., 6 yr., Ay. 60, 1½; Ay. 64, 70, 2.
	Ay. 12-yr.	36.00	56.2	
	Ay. 6-yr.	- -	54.3	
	R. C.$_2$	35.74	54.8	
	Yarn.	36.05$_2$	53.6$_2$	
	Ay. 60	35.94	54.6	
	Ay. 64	35.90	54.3	
	Ay. 70	35.88	54.1	
	Ad.	35.92	54.6	
6737	R. C.	19 33 26.41	63 9 23.8	
	Ja.	[25.81]	22.7	
	Ad.	26.41	23.2	
6808	R. C.	19 44 28.35	69 1 53.6	c. — o. in decl.: F. — 1″.0 (2 obs.); Gr. + 0″.7.
	Ja.	[28.15]	54.0	
	Ay. 64	28.56	53.4	
	Ay. 68	- -	52.4	
	Ay. 69	- -	52.9	
	Ay. 71	28.52$_2$	53.1	
	Yarn. 72	- -	54.1	
	Ay. 73	28.35$_2$	53.2	
	Ad.	28.44	53.3	
6834	R. C.	19 48 26.43	60 53 17.0$_2$	
	Ja.	[26.02]	16.9	
	Arm.	26.51$_2$	17.4	
	Ay. 71	- -	16.2	
	Ay. 72	26.34$_1$	15.1	
	Ad.	26.43	16.4	
6836	St.	19 48 35.19	69 56 [57.4]	St. is replaced by Pulc. and Ay. 60, owing to the change in Mädler's P. M.
	Pulc.		58.5	
	Ay. 60	- -	58.2	
	Ay. 64	35.14	58.1	
	Wn. 67	35.28	58.4	
	Ay. 70	35.22	58.4	
	Main	35.05	58.0	
	Ad.	35.18	58.2	
6861	R. C.	19 52 41.11	60 29 34.1	c. — o. in decl.: Fed. — 0″.6; Gr. + 1″.0.
	Ja.	[40.73]	33.4	
	Yarn.	41.07	32.7	
	Ay. 72	41.01$_2$	33.1	
	Ad.	41.07	33.3	
6862	R. C.	19 52 45.08	60 17 1.0	c. — o. in decl.: Fed. + 0″1; Gr. — 0″.9. The A. R. should be increased by the P. M. since 1855, but its amount is uncertain.
	Ja.	[44.89]	16 59.4	
	Ay. 71	45.20$_1$	17 0.0$_1$	
	Ad.	45.12	17 0.2	
6869	Mädl.	19 53 [33.64]	64 23 17.6	
	R. C.	33.77	19.6	
	Arm.	34.07	19.4	
	Yarn.	33.92$_2$	19.5$_2$	
	Q.	34.14$_2$	19.1$_2$	
	Ad.	33.96	19.4	
6905	Mädl.	20 0 8.84	64 28 14.9	Weight 1½ assigned to Ay. 64 and Ay. 70.
	Arm.	8.88	16.0	
	R. C.		16.2	
	H. 43	-	16.3	
	Ay. 64	8.83$_2$	15.9	
	Ay. 70	8.82$_1$	15.5	
	Main	8.75$_1$	15.2$_2$	
	Ad.	8.83	15.9	
6913	Mädl.	20 0 56.59	64 16 52.0	Ay. 50 has weight = 1½ in decl. Auwers's corr. is — 4″.4; hence Mädler is largely in error. A. R. uncertain.
	T.	- -	53.6	
	Arm.	56.75	56.7	
	R. C.	- -	55.2	
	Ay. 50	56.83	53.8	
	Pulc.	56 44	54.3	
	Ad.	56.65	54.6	

No.	Authority.	Right ascension.	Declination.	Remarks.
		h. *m.* *s.*	° ′ ″	
6926	Mädl.	20 2 14.94	67 30 1.8	Mädler's P. M. in decl. has the wrong sign by a misprint. Weights in decl.: Ay. 60, 2; Ay. 70, Main, 1½.
	Ay. 60	14.92	1.8	
	Ay. 64	14.96	1.8	
	Ay. 70 -	14.91	1.6	
	Main - -	14.73_2	1.8	
	Ad. -	14.91	1.8	
6930	P. M. -	20 3 9.96	63 31 52.1	c. — o. in decl.: F. — 0″.6; Gr. + 0″.3. P. M. in A. R. insensible.
	R. C. -	10 12	51.7	
	Arm. -	10.13	51.3_2	
	Ja. - - -	[10.00]	53.0	
	Ad. -	10.07	52.0	
6932	Mädl. -	20 3 33.34	61 37 57.5	The P. M. is very exactly confirmed by Bessel 1820.
	Arm.	33.16	58.8_2	
	Ch. - -	- -	58.1	
	Yarn.	33.42_2	58.8	
	R. $C._2$	- -	57.4	
	Ay. 60 - -	33.53	58.1	
	Ay. 73 -	33.30_1	58.9_1	
	Ad. -	33.35	58.3	
6939	Mädl.	20 4 20.89	67 40 5.4	I do not understand Mädler's calculation, and have assumed no P. M. in decl., which gives c. —o.: Gr. —0″.5; F. + 4″.7 (1 obs.); Auwers Br. — 5″.2 (1 obs.). The P. M. would be about — 0″.04, and decl. for 1875.0 2.″6, if there is no mistake in Bradley's declination.
	R. C. -	20.92	4.2	
	Arm.	21.08	3.3	
	Ad. -	20.96	3.8	
6970	Mädl. - -	20 9 31.94	61 42 0.5	
	Arm. -	32.12	0.8	
	R. $C._2$ -	31.85	0.7	
	Ay. 71	31.64_1	1.5	
	Ay. 73 -	31.87	0.8	
	Ad. - -	31.91	1.0	
6980	Mädl. -	20 11 9.76	60 15 29.6	Br. has but one observation in decl. c. — o. in decl.: Br. 0″.0; Pi. — 1″.4; Gr. + 0″.5.
	R. C.		30.6	
	Arm.	- -	31.6	
	R. $C._2$	9.66	30.1	
	Q. -	9.78_2	31.2	
	Ay. 72 - -	9.59_1	31.5_1	
	Ad. - - - -	9.71	30.9	
6994	Mädl. -	20 12 [40.27]	64 22 51.4	Br. has but one observation. I have assumed no P. M. in decl., which gives c. — o.: Br. — 0″.6; Pi. + 2″.0; Gr. + 1″.7. The least square solution alters the result very little.
	R. C. -	40.48	50.8	
	Arm. -	40.45	51.4	
	R. $C._2$ - -	40.66	50.1	
	Ay. 64 -	40.54	51.3	
	Ad. -	40.53	50.9	
7024	Mädl. -	20 17 31.28	61 51 37.2	
	Ay. 40 -	- -	38.2	
	Arm. - -	31.44	37.6	
	Ay. 45 - - - -	.	38.3	
	R. C. - - -	- -	37.4	
	Yarn. -	31.31_2	37.7	
	Ad. -	31.35	38.0	
7037	Mädl.	20 19 [32.74]	68 28 48.9	Ay.'s declinations have a weight 1½. I have rejected Mädl.'s P. M. in A. R. Br. has no A. R., and Gr. is probably 1ˢ in error. Gr. and P. M. agree well in decl.
	H. 44	32.23	50.2	
	R. C.	32.16	50.1	
	Arm. -	32.31	51.6	
	Ja. - - -	[31.78]	50.0	
	Ay. 71 -	32.16_1	48.9	
	Ay. 73 -	32.26	49.4	
	Ad. - -	32.23	49.9	
7051	T. -	20 21 [22.74]	61 51 43.5	P. M. in decl. used, + 0″.10. c. — o.: F. — 4″.4; Pi. + 1″.5.
	R. C.	23.28_2	44.6	
	R. $C._2$ -	23.42	43.8	
	Ad. - -	23.36	44.0	

No.	Authority.	Right ascension.			Declination.			Remarks.
		h.	*m.*	*s.*	°		″	
7090	Mädl.	20	26	36.56	68	21	3.0	Fed. is 10″ too far south.
	Arm.			36.67			4.0	
	Ay. 50			36.71			2.7	
	R. C.$_2$			36.81			2.4	
	Ad.			36.69			3.0	
7098	St.	20	27	28.84	62	34	27.6	
	Ay. 64			28.85			27.3	
	Ay. 70			28.80			27.6	
	Main			28.83			27.2	
	Ad.			28.84			27.5	
7176	R. C.	20	37	38.42	60	3	13.2	The P. M. in A. R. is inconsiderable. c. — o. in decl.: F. + 0″.5; Gr. + 0″.5.
	Arm.			38.55			13.0	
	Ja.			[38.15]			13.4	
	Q.			38.32$_1$			13.3	
	Wn. 67			38.00			12.7	
	Ad.			38.49			13.0	
7193	R. C.	20	39	59.58	60	9	5.2	I have used no P. M. Fed. gives 5″.7 (1 obs.) and Gr. gives 7″.5 in declination.
	Ja.			[59.10]			6.5	
	Yarn.			59.58$_2$			6.2	
	Ay. 71			59.56$_1$			4.2	
	Ad.			59.58			5.7	
7211	Mädl.	20	41	36.85	66	12	8.0	Auwers has corrected Bessel by — 2″.9 in decl., which accounts for the variation from Mädler.
	H. 43						9.9	
	R. C.						12.6	
	Arm.			36.96			12.0	
	Ay. 50			37.09			11.1	
	Pulc. 61			36.92			11.0	
	Yarn. 72						12.1	
	Ad.			36.97			11.5	
7220	St.	20	42	44.69	61	21	13.3	Weight 2 to Ay. 64, and the decl. of Ay. 70, 1½, to the decl. of Main and Smyth.
	R. C.$_2$			44.65			13.2	
	Yarn.			44.68$_2$			14.2	
	Q.			44.72			11.8	
	Ay. 64			44.65			13.4	
	Sm.			[44.99]			13.0	
	Main			44.63			12.7	
	Ay. 70			44.58			13.1	
	Ad.			44.66			13.1	
7416	St.	21	15	35.70	62	3	22.4	The observations are very numerous, but do not agree quite as well as would be expected.
	Lang.						22.2	
	Yarn.			35.68			22.6	
	R. C.$_2$			35.75			22.4	
	Ay. 64			35.56			22.4	
	Wn. 67			35.75			22.4	
	Leid.						23.2	
	Main			35.72			22.8	
	Main						22.7	
	Ay. 70			35.63			22.8	
	Pulc.						23.3	
	Ad.			35.68			22.6	
7428	Mädl.	21	16	46.38	64	20	31.2	
	H. 41						31.7	
	R. C.						33.0	
	Arm.			46.49$_1$			33.3	
	Ay. 60			46.32			31.8	
	Ay. 73			46.50$_1$			33.8$_1$	
	Ad.			46.40			32.6	
7430	H. 44	21	17	20.98	60	13	32.8	
	R. C.			20.91			33.9	
	Ja.			[20.60]			34.8	
	Sm. 59			21.05			34.5	
	Sm. 63, 68			21.01			34.2$_2$	
	Wn. 71							
	Wn. 72			20.99			32.1	
	Ad.			20.99			33.7	

No.	Authority.	Right ascension.	Declination.	Remarks.
		h. *m.* *s.*	° ′ ″	
7449	T.	21 19 [47.47]	63 41 26.3	The adopted P. M. represents Piazzi's declination to +0″.6, and his A. R. closely.
	H. 43	48.31	23.6	
	Arm.	48.07$_1$	25.8	
	R. C.	48.08	25.6	
	Ay. 64	48.11	25.0	
	Ay. 73	. .	24.4	
	Ad.	48.15	25.0	
7482	Mädl.	21 25 21.02	66 15 47.8	Airy's position (10 obs. in all) has had double weight.
	Arm.	21.05	51.1	
	R. C.	. .	49.0	
	Ay. 60, 64, 73	21.09	50.8	
	Ad.	21.06	50.4	
7493	St.	21 27 2.37	70 0 43.5	c. — o. for Pi. — 0″.1; for Gr. + 0″.5.
	Laug.	. .	43.2	
	Yarn.	2.35	43.1	
	Ay. 64	2.37	43.5	
	Wn. 67	2.45	43.5	
	Leid.	. .	43.5	
	Main	2.43	43.8	
	Main	. .	43.2	
	Ay. 70	2.33	43.6	
	Pulc.	. .	44.3	
	Ad.	2.32	43.5	
7533	T.	21 33 50.89	61 44 18.4	
	Arm.	50.96	17.2	
	H.	50.94	16.1	
	R. C.	50.87	16.7	
	R. C.$_2$	51.03	15.4	
	Q.	51.06$_2$	17.6$_2$	
	Ay. 64	50.91	16.6	
	Wn. 67	50.84	16.7	
	Ad.	50.93	16.8	
7542	Mädl.	21 34 33.90	61 31 6.7	
	Arm.	34.03	6.6	
	Yarn.	33.98	7.2	
	Ay. 60	34.00	6.8	
	Ay. 72	34.07$_1$	6.7	
	Ad.	33.99	6.8	
7595	Mädl.	21 41 [50.83]	60 32 39.4	Ay.'s declinations receive double weight.
	Arm.	[50.78]	40.5	
	Ay. 60	50.61	39.8	
	LeV.	. .	39.5	
	Ay. 64	50.58	39.3	
	Ay. 70	50.58	40.0	
	Ad.	50.59	39.8	
7605	Mädl.	21 43 44.09	60 6 46.6	
	Arm.	44.04	45.9	
	H.		46.3	
	R. C.	. .	46.6	
	Ay. 64	44.02	47.0	
	Ad.	44.05	46.5	
7610	Ay. 40–45	21 44 48.54	69 34 17.4$_2$	With P. M. — 0″.05 in decl. the representation is, c. — o.: F. + 1″.4 (3 obs.); Gr. — 0″.5; Pd. — 0″.3. The evidence of P. M. in A. R. is contradictory.
	R. C.	48.38	16.9	
	Ay. 50	48.59$_1$	15.7$_1$	
	Ja.	[48.24]	17.2$_2$	
	Lang.	. . .	16.0	
	Yarn.	48.62	16.6$_2$	
	Ay. 60	48.64	16.2$_9$	
	Ay. 64	48.52	17.1	
	Ay. 72	48.58	16.7	
	Ad.	48.55	16.5	
7611	R. C.	21 45 5.99	64 35 20.1	c. — o. in decl.: F. — 0″.7; G. + 0″.2. P. M. assumed zero.
	Ja.	[5.73]	19.8	
	Q.	6.14	19.6	
	Wn. 67	6.23	19.6	
	Ay. 72	5.82$_1$	20.1$_1$	
	Ad.	6.08	19.8	

No.	Authority.	Right ascension.	Declination.	Remarks.
		h. m. s.	° ′ ″	
7615	Mädl.	21 45 39.49	60 41 27.3	P. M. from Pi. — 0″.035. The position is uncertain.
	T.	. .	25.8	
	R. C.	39.60	27.9	
	Arm.	. .	25.9	
	Ad.	39.54	26.5	
7621	P. M.	21 46 14.31	66 12 41.0	C. — O.: F. + 1″.3, — 10″.6; G. 0″.0. One of F.'s observations is, perhaps, 10″ in error. F. and Gr. contradict as to the direction of proper motion in A. R.
	R. C.	14.30	42.0	
	Ja.	[13.79]	40.2	
	Q.	14.44	40.3_2	
	Ad.	14.35	40.9	
7651	R. C.	21 51 36.02	60 56 56.9	F. disagrees about 5″; Gr. gives 57″.0. I have assumed no P. M.
	Ja.	[35.53]	57.0	
	Ch. 53	. .	58.0_2	
	Ay. 72	36.20	57.2	
	Ay. 73	36.17	57.1	
	Ad.	36.13	57.2	
7658	T.	21 53 7.62	63 1 50.4	
	Arm.	7.88	50.2	
	H. 43	7.61	49.8	
	R. C.	7.59	51.0	
	Ay. 50		50.0_2	
	Lang.	.	49.5	
	Ay. 60	7.87	50.3	
	Ay. 70	. .	50.7	
	Ay. 72	7.59_1	50.5	
	Ad.	7.72	50.3	
7699	Mädl.	22 0 [7.72]	62 30 43.2	I have assumed an error in the A. R. of Bessel's Bradley, and *no* P. M. in A. R.; and that Ja.'s declination is too large by 17″.34, one year's precession. The proper motion in decl. is from comparson with Groombridge. Weight of Ay. 60, $1\frac{1}{2}$ in decl.
	Ay. 50	. .	42.8	
	Ja.	[7.73]	43.0	
	R. $C._2$	8.19	41.1	
	Ay. 60	8.12	42.6	
	Q.	8.30_1	42.6_2	
	Ay. 72	8.22_1	44.0_1	
	Ad.	8.19	42.5	
7700*	Mädl.	22 0 [10.61]	64 1 8.8	Weight to all authorities (save R. $C._2$) $1\frac{1}{2}$. The fainter companion precedes $0^s.98$, and is 1″.8 north.
	Lang.	. .	7.5	
	R. $C._2$	[9.74_1]	8.2	
	Ay. 60	9.86	8.9	* Following.
	Ay. 64	9.91	8.4	
	Ay. 70	10.10	9.1	
	Main.	10.12	8.0	
	Ad.	10.00	8.4	
7707	St.	22 1 12.39	62 10 33.4	
	Ay. 64	12.61	34.0	
	Pulc.	12.50	34.6	
	Ad.	12.48	34.0	
7708	Mädl.	22 1 18.01	61 40 18.2	Weight of Sm. 65, $1\frac{1}{2}$.
	Arm.	17.78	20.0	
	R. $C._2$	18.14_2	17.5	
	Q.	17.91_2	19.6_2	
	Sm. 62	. .	19.1	
	Sm. 65	18.06	20.3	
	Ay. 73	17.87_1	20.2_1	
	Ad.	17.97	19.4	
7759	R. C.	22 7 53.94	60 8 28.5	
	Ja.	[53.50]	30.6	
	Arm.	54.06_1	28.0_2	
	Yarn.	53.92_2	27.7_2	
	Sm. 57	54.13	29.2	
	Sm. 59	. .	29.3	
	Sm. 63	54.14	28.8	
	Sm. 67	54.09_2	28.5	
	Ad.	54.05	28.9	

No.	Authority.	Right ascension.	Declination.	Remarks.
		h. *m.* *s.*	° ′ ″	
7760	H. 44	22 7 47.46	69 30 54.8	c. — o. in decl.: F. = — 0″.8; Gr. = + 0″.2; Pd. = + 0″.4.
	R. C.	47.43	55.0	
	Ja.	[47.02]	56.6	
	R. $C._2$	47.18_2	54.0	
	Q.	47.37_1	54.5_2	
	Main 70	47.36	55.8	
	Main 72	47.64_2	54.7	
	Ay. 73	47.32_2	55.5_2	
	Ad.	47.39	55.1	
7766	T.	22 8 28.74_2	62 40 23.9_2	
	H.	28.56_1	23.5	
	R. C.	28.42	24.2	
	Wn. 67	28.97_1	23.5_1	
	Ay. 73	28.88_1	23.9_1	
	Ad.	28.67	23.8	
7775	Mädl.	22 9 [53.50]	62 32 32.3	Mädler's A. R. and P. M. in A. R. have been omitted.
	Arm.	53.92	34.0	
	R. C.	53.79	33.0	
	Yarn.	53.95_2	32.2_2	
	Q.	54.07_2	33.4_2	
	Ay. 64	53.79	32.2	
	Ad.	53.89	33.0	
7786	R. C.	22 13 31.76	65 30 13.6	
	Arm.	[30.78_1]	13.8	
	Ja.	[30.89]	12.6	
	Ay. 50	31.71	12.8	
	Q.	31.80	13.8_2	
	Ay. 72	- -	12.7	
	Ad.	31.76	13.2	
7789	Mädl.	22 14 7.96	62 10 40.5	c. — o. in decl.: Br. — 2″.0 (1 obs.); F. — 3″.2 (1 obs.); P. + 1″.9 (14 obs.); Gr. — 0″.8.
	Ay. 46	7.92_2	41.3	
	H. 43	7.94	40.4	
	Ay. 45	8.25	41.3	
	R. C.	7.88	40.5	
	Arm.	8.05	41.6	
	Pulc. 58	7.95	41.2	
	Ay. 73	8.21_1	41.7_1	
	Ad.	8.02	41.1	
7810	R. C.	22 18 2.03	66 4 31.4	c. — o. in decl.: F. + 0″.3 (2 obs.); G. + 0″.1; P. M. — 0″.4.
	Ay. 50	2.13	31.0	
	Ja.	[1.42]	30.8	
	Q.	2.04_2	30.4_2	
	Main	1.80	31.4	
	Ay. 72	2.08_2	31.2	
	Yarn. 72	- -	30.0	
	Ad.	2.01	30.9	
7829	T.	22 21 35.85_2	62 41 33.0	c. — o.: Pi. 0″.0; Gr. — 0″.5.
	R. C.	35.83	34.6	
	Yarn.	35.88_2	34.8_2	
	Ay. 70	- -	30.9_2	
	Ad.	35.85	33.4	
7837	Mädl.	22 23 4.03	64 29 41.8	Weight of Ay. 60 in A. R., $1\frac{1}{2}$; in decl., 2.
	Arm.	4.26	42.8	
	Ay. 60	4.07	42.7	
	Q.	4.24	42.3_2	
	Yarn.	- -	40.6_1	
	Ad.	4.14	42.4	
7875	R. C.	22 29 24.02	61 7 57.9	c. — o. in decl.: Fed. — 0″.7; Gr. + 2″.0. Position uncertain. With P. M. +0″.04 the decl. would be 58″.9.
	Arm.	23.99_1	57.6	
	Ad.	24.01	57.8	
7876	Arg. 230	22 29 25.50	69 16 0.7	
	H. 44	25.58	0.4	
	Wn. 67	25.51	15 59.8	
	Ad.	25.52	16 0.5	

No.	Authority.	Right ascension.	Declination.	Remarks.
		h. *m.* *s.*	° ′ ″	
7878	Pd.	22 29 44.91	69 43 42.6	c. — o.: F. — 0″.1 (2 obs.); G. + 0″.2.
	P. M.	44.78	42.2	
	R. C.	44.93	42.0	
	Ja.	[44.71]	43.4	
	R. C_2	45.08_2	41.8	
	Q.	45.13_1	42.5_2	
	Ad.	44.96	42.4	
7902	St.	22 34 13.21	62 56 5.6	
	Yarn.	13.02_2	5.9	
	Pulc.	13.13	5.9	
	Ay. 72	. .	5.6	
	Ad.	13.15	5.7	
7963	P. M.	22 44 45.61	67 54 28.5	Gr. gives 45ˢ.34 in A. R. without S. C., and 26″.9 in decl. with it. P. M. used + 0ˢ.020 + 0″.10. The central point between the two stars is observed.
	R. C.	45.66	28.2	
	Ja.	[45.18]	27.5	
	Main	45.57_2	27.3	
	Ad.	45.62	27.8	
7967	St.	22 45 14.02	65 32 34.8	Weights in decl.: St., 4; Laug., 2; Main, 2; Wn. 67, 1½.
	Laug.	. .	34.5	
	R. C_2	13.93	35.4	
	Yarn.	14.17	35.0	
	Main	14.08	35.3	
	Wn. 67	14.11	35.6	
	Ay. 70	. .	35.4	
	Ad.	14.05	35.0	
7973	Mädl.	22 46 30.22	61 1 57.2	Mädler's P. M. in A. R. is probably too large.
	R. C.	30.21	55.4	
	Arm.	30.13	56.7	
	Ay. 60	30.15	56.7	
	Q.	30.21_1	56.5_2	
	Main	29.98	56.8	
	Ay. 7	30.09	56.7	
	Ad.	30.14	56.5	
8039	Mädl.	22 58 [47.99]	66 32 8.8	c. — o. in decl.; Br. — 0″.7 (1 obs.); Gr. + 1″.1. The A. R. is uncertain.
	Arm.	[47.84_1]	8.8	
	Ay. 60	47.60	8.3	
	Q.	47.66_1	6.9_2	
	Ay. 64	47.76_2	8.2_2	
	Ay. 72	47.73_1	7.7	
	Ad.	47.68	8.1	
8068	R. C.	23 2 53.05	63 32 47.5	
	Ja.	[52.92]	47.9	
	Ad.	53.05	47.7	
8077	R. C.	23 4 59.70	66 33 48.6	c. — o. in decl.: F. + 0″.8 (1 obs.); Gr. + 0″.1.
	Ja.	[59.44]	48.7	
	Laug.	. .	48.6	
	Ay. 64	59.71	48.9	
	Ay. 72	59.76	49.7	
	Ad.	59.72	48.9	
8124	Mädl.	23 13 30.06	67 25 40.5	
	Ay. 60	. .	39.9	
	Yarn.	30.05_2	40.8	
	Q.	30.07	39.7_2	
	Ay. 64	29.94	39.6	
	Wn. 67	. .	39.9	
	Main	29.72_1	40.3	
	Ay. 70	29.96	39.5	
	Ad.	29.98	39.9	
8137	R. C.	23 14 47.01_2	61 17 11.0_2	c. — o.: Auwers — 2″.8 (1 obs.); Bessel 1815 + 1″.7 (3 obs.) Mädl. gives 46ˢ.39 and 4″.6, and is much in error.
	Arm.	47.14_1	12.2	
	Sm.	47.47	10.6	
	Ad.	47.24	11.3	

No.	Authority.	Right ascension.	Declination.	Remarks.
		h. *m.* *s.*	° ′ ″	
8138	Mädl.	23 15 7.27	61 31 45.1	c. — o. in decl.: Auwers + 0″.6 (1 obs.); Bess. 1815 — 0″.8 (6 obs.).
	Arm.	7.63$_1$	43.4	
	Bonn.	7.60$_2$	44.8$_1$	
	Sm.	. .	42.8	
	Ad.	7.46	43.5	
8162	St.	23 19 17.53	61 35 48.2	
	Yarn.	. .	48.6$_2$	
	Pulc.	17.51	47.6	
	Ay. 73	17.53$_2$	47.9	
	Ad.	17.52	48.0	
8173	Mädl.	23 21 0.78	69 59 48.0	In declination I have used no P. M. c. — o.: Auwers — 2″.2 (1 obs.); Gr. + 1″.8; F. — 1″.9 (2 obs.).
	Arm.	1.02	49.9	
	R. C.	. .	48.9	
	Ja.	[0.49]	48.8	
	Laug.	. .	48.5	
	Yarn.	0.99$_2$	49.9$_2$	
	Q.	0.96	48.9$_2$	
	Ay. 70	0.92	50.2	
	Ad.	0.93	49.3	
8180	Mädl.	23 22 0.18	69 40 19.8	
	Arm.	0.44$_2$	20.6	
	Ay. 60	0.31	20.0	
	Q.	0.32	19.3	
	Ay. 64	0.31	19.7	
	LeV. 64	. .	19.4	
	Ay. 70	0.16	19.3	
	Ay. 73	0.11$_1$	19.6	
	Ad.	0.27	19.6	
8273	St.	23 41 56.61	67 6 44.4	
	Laug.		43.6	
	LeV. 64	.	43.8	
	Pulc.	56.67	44.4	
	Ay. 71	56.71$_1$	44.2	
	Ad.	56.65	44.2	
8277	R. C. (Ad.)	23 42 36.43	64 10 57.0	Gr. agrees within 0″.8.
8279	Mädl.	23 42 45.34	61 31 11.3	
	Ay. 40	-	12.0	
	Arm.	45.48	11.7	
	Ay. 45		10.9	
	R. C.	. .	10.7	
	Q.	45.57$_2$	11.2$_2$	
	Ay. 73	45.43$_1$	11.1$_1$	
	Ad.	45.45	11.3	
8338	Mädl.	23 54 [22.47]	61 28 52.7	P. M. from comparison with Bessel 1815. A. R. uncertain.
	Arm.	22.03	53.9	
	R. C.	22.01	53.6	
	R. C.$_2$	21.88$_1$	52.4	
	Q.	21.88$_1$	53.0$_3$	
	Yarn.	21.73$_2$	53.9$_2$	
	Ay. 64	21.73	52.7	
	Sm. 64	. .	52.3	
	Sm. 68	22.16	52.4	
	Ad.	21.93	53.0	
8344	Mädl.	23 55 15.06	60 31 35.8	The adopted P. M. in decl. (Mädler's) gives c. — o.: Auwers — 0″.4 (1 obs.; F. LL. + 0″.4 (2 obs.); Gr. — 0″.7.
	Arm.	15.22$_2$	36.6	
	Yarn.	14.91$_2$	35.5	
	Ay. 60	15.01$_3$	35.1	
	LeV. 64	. .	36.4	
	Ay. 72	14.91$_1$	36.2	
	Ad.	15.05	36.0	

No.	Authority.	Right ascension.			Declination.			Remarks
		h.	*m.*	*s.*	°	′	″	
8355	Mädl.	23	56	12.55	65	24	8.1	
	Arm.			12.56_1			10.2	
	Yarn.			12.72_2			10.2_2	
	Q.			12.66_2			9.5	
	Main			12.41			8.9_2	
	Sm.			. .			10.2_1	
	Ay. 72			12.70			10.2	
	Ad.			12.62			9.9	
8359	Mädl.	23	57	47.64	61	35	29.3	The proper motion in A. R. used was $-0^s.002$, derived by a rough comparison with Bessel's Bradley.
	Ay. 40			48.05_2			29.8	
	R. C.			48.07			29.6	
	Arm.			48.26			29.9	
	Pulc. 62			48.03			29.6	
	Ad.			48.04			29.7	
8366	R. C.	23	58	39.20	60	37	5.3	c. — o. in decl.: F. + 0″.1; Lal. — 3″.4; Gr. + 0″.8. P. M. used = 0.
	Ay. 45			39.26			4.2	
	Ja.			[38.92]			5.2	
	Ay. 60			39.29			4.2	
	LeV. 64			. .			4.1	
	Ad.			39.25			4.6	
8373	Mädl.	23	59	57.48	63	30	0.5	
	Arm.			57.64_2			0.6	
	Ay. 72			57.51_1			1.6	
	Ad.			57.54			1.1	
46	T.	0	10	15.27	60	50	21.0	Proper motion in declination (about $-0''.01$) neglected.
	R. C.			14.90			18.5	
	Arm.			15.04			18.6	
	$R. C._2$			15.08			18.8	
	Q.			15.12			18.7_2	
	LeV.			. .			18.5	
	Ay. 71			14.95			20.3_1	
	Ad.			15.07			19.1	
65	R.	0	13	56.13	61	11	6.5	Groombridge gives 8″.8. I have adopted P. M. = 0.
	R. C.			56.16			8.4	
	Arm.			56.18			8.7	
	Q.			56.15_1			8.4_2	
	LeV.			. .			8.2	
	Ay. 71			56.11_1			7.9_2	
	Ad.			56.15			8.0	
68	Mädl.	0	14	[47.04]	67	7	47.7	Mädler depends chiefly upon Bessel 1815.
	Smyth 59			46.97			45.8	P. M. by Auwers — 0″.04 (1 obs.)
	Q.			46.84_2			44.9	Bessel 1815 — 0″.06 (24 obs.)
	Smyth 66			47.00			45.1	Adopted — 0″.05
	Main			46.71			45.7	
	Ay. 73			46.71			44.9	The A. R. is uncertain.
	Ad.			46.85			45.3	
80	Mädl.	0	17	54.38	61	8	16.9	Airy 60 has 40 observations in declination.
	Ay. 40						16.8	
	Ay. 45			. .			16.9	
	Arm.			54.53			17.8	
	R. C.			. .			17.5	
	Ay. 60			54.57			17.2	
	Ay. 72			54.51			16.8	
	Ad.			54.50			17.2	
114	Mädl.	0	24	14.96	65	49	42.6	
	Ay. 50			15.08			44.1_2	
	Arm.			14.92			[47.6]	
	$R. C._2$			15.16_2			42.8	
	Q.			14.84_{10}			43.3_{10}	
	Ay. 64			14.92			43.4	
	Ay. 73			14.84_2			44.9_2	
	Ad.			14.95			43.6	

No.	Authority.	Right ascension.	Declination.	Remarks.
		h. *m.* *s.*	° ′ ″	
126	St.	0 25 54.50	62 14 30.4	Weight of 12-yr. and Pulc., 2; of Ay. 72, 1½ in declination.
	Ay. 12-yr.		29.8	
	Pulc.	.	29.0	
	Arm.	54.72	29.0	
	Yarn.	54.44_2	29.4	
	Q.	54.55	30.0	
	Ay. 72	54.50	29.2	
	Ad.	54.52	29.4	
131	Mädl.	0 27 8.98	66 3 37.6	Weight, 1½ to Ay. 60, Ay. 64, Ay. 70.
	Arm.	8.96	39.4	
	Yarn.	$[8.69_1]$	41.0_2	
	Ay. 60	8.90	38.5	
	Ay. 64	9.12	38.4	
	Ay. 70	8.90	38.5	
	Ay. 73	9.10	37.0	
	Ad.	8.99	38.7	
139	T.	0 28 15.47_2	61 10 31.8	Piazzi gives 32″.3; hence the P. M. is very small.
	R. C.	15.43	31.7	
	Arm.	15.71_2	31.8	
	Ad.	15.53	31.8	
175	R. C.	0 34 37.61	65 27 41.8	With P. M. — 0″.02 Lalande gives c. — o. + 1″.7 (2 obs.); Gr. — 1″.3.
	Arm.	$[38.34_1]$	41.5_2	
	Ay. 60	. .	41.0_2	
	Q.	37.69_1	41.6_2	
	Ay. 64	37.62	41.4	
	Ay. 72	37.58	41.3	
	Yarn. 72	. .	42.6	
	Ad.	37.62	41.6	
228	St.	0 43 9.32	63 33 58.8	
	Pulc.	9.52	59.0	
	Sm.	. .	58.4_2	
	Ad.	9.42	58.8	
239	Mädl.	0 45 [36.87]	60 26 17.1	Br. has no declination; Mädler's P. M has been used.
	Arm.	37.31	17.3	
	Yarn.	37.24_2	17.4	
	Q.	37.33_2	17.1_2	
	LeV.	. .	17.7	
	Ay. 72	37.35	17.7	
	Ad.	37.31	17.5	
253	St.	0 49 10.67	60 2 21.0	Everything has double weight save the A. R. of Main. Mädler's P. M. is confirmed (nearly) by Auwers, 1 obs., and has been retained.
	Main	10.74	21.2	
	Leiden	. .	21.2	
	Ay. 71	10.61	22.0	
	Ad.	10.66	21.3	
261	R. C.	0 50 37.59	65 40 32.7	P. M. + 0ˢ.006 — 0″.02. c. — o.: Fed. — 0ˢ.31 + 0″.3; LL. — 0ˢ.16 — 1″.1; Gr. + 0ˢ.18 + 0″.4.
	Arm.	37.33_2	33.7	
	Q.	37.44_2	34.4_2	
	LeV.	. .	32.4	
	Ay. 72	37.69	32.7	
	Ad.	37.55	33.1	
282	R. C.	0 55 [56.10]	60 24 8.4	
	Ay. 72	55.31	9.5	
	Ad.	55.31	9.1	
298	Mädl.	0 57 [50.12]	65 18 0.9	The P. M., + 0″.03, is from Bessel 1815, compared with modern observations.
	Arm.	50.54_2	3.4	
	R. C.	50.37_2	4.0	
	Sm.	. .	2.6	
	Ay. 64	50.32	3.5	
	Ad.	50.40	3.4	
302	R. C.	0 58 30.37	62 5 32.6	Quite uncertain.
	Ad.	30.37	32.6	

No.	Authority.	Right ascension.	Declination.	Remarks.
		h. *m.* *s.*	° ′ ″	
327	Mädl.	1 2 13.26	68 6 45.3	
	Arm.	13.62$_2$	46.5	
	Q.	13.55$_1$	44.1	
	Ay. 64	13.31	45.8	
	Ay. 72	13.42$_2$	45.9	
	Ad.	13.41	45.6	
335	Ay. 40	1 3 21.78	63 32 14.0	The P. M. is rather uncertain. Lalande gives 14″.2.
	H. 43	21.63	13.1	
	Arm.	22.07$_1$	15.6	
	Sm. 59	. .	14.2	
	Pulc. M. C. 62	21.39$_1$	15.9$_1$	
	Sm. 66	. .	14.5	
	Ad.	21.71	14.4	
338	Mädl.	1 3 33.80	64 21 13.7	I have corrected Ay. 64 by + 0^s.18 for erroneous proper motion, as given in the B. A. C.
	Arm.	33.96$_1$	12.3	
	R. C.$_2$	33.84$_1$	12.3	
	Ay. 64	34.09	12.4	
	Q.	33.98	12.2	
	Ad.	33.94	12.3	
379	C. A.	1 9 46.85	67 9 25.3	The A. R. for 1875 is uncertain.
	H.	46.74	24.4	
	Arm.	.	24.0	
	Sm.	. .	24.8	
	Ad.	46.80	24.6	
382	R. C.	1 10 13.44	62 53 5.4	
	Ad.	13.44	5.4	
394	Mädl.	1 12 45.45	64 0 6.0	The P. M. used, — 0″.04, represents the old observations, c. — o.: Auwers — 2″.1 (1 obs.); Pi. + 0″.9; Gr. — 0″.2.
	Arm.	45.44	7.0	
	R. C.$_2$	45.40$_2$	6.1	
	Ay. 64	45.56	6.0	
	Main	. .	6.9$_1$	
	Ad.	45.47	6.4	
412	St.	1 17 7.52	67 28 35.4	
	Pulc.	7.62	35.8	
	Main		35.7	
	Ay. 70	. .	36.0$_2$	
	Ad.	7.57	35.6	
438	Mädl.	1 21 57.39	69 37 12.7	
	Arm.	[57.08$_2$]	13.8	
	R. C.$_2$	57.41	12.4	
	Yarn.	57.46$_2$	12.4$_9$	
	Q.	57.53$_2$	11.9$_2$	
	Ay. 64	57.51	13.1	
	Wn. 68	. .	13.3$_2$	
	Ay. 70	57.37	12.9	
	Ad.	57.44	12.8	
443	Mädl.	1 23 19.41	69 22 28.2	
	R. C.	. .	27.8	
	Arm.	19.24$_1$	28.2	
	R. C.$_2$	19.48$_2$	25.7	
	Q.	19.11$_2$	27.3$_2$	
	Ay. 73	19.21$_2$	28.0$_2$	
	Ad.	19.31	27.4	
444	R. C.	1 23 22.63	67 45 54.9	The P. M. used, + 0^s.020 — 0″.10, represents Pi. and Gr. nearly in A. R., and in decl. gives c. — o.: Pi. — 0″.5; Gr. + 0″.6.
	R. C.$_2$	22.67$_2$	53.7	
	Q.	22.33$_1$	55.5$_2$	
	Ay. 71	22.43$_1$	55.4	
	Ad.	22.55	54.9	
450	R. C.	1 24 14.21	62 56 55.6	Gr. gives 14^s.09, 56″.9 with systematic correction.
	Arm.	14.47	56.6	
	Ay. 73	14.01$_1$	59.2$_1$	
	Ad.	14.27	56.7	

No.	Authority.	Right ascension.	Declination.	Remarks.
		h. *m.* *s.*	° ′ ″	
498	St.	1 33 6.31	67 24 35.1	
	Pulc.	6.45	34.3	
	Ay. 71	6.34	34.1	
	Ad.	6.37	34.6	
499	Mädl.	1 33 16.15	69 59 22.8	
	Arm.	15.86$_2$	23.6	
	Laug.	. .	22.9$_{10}$	
	R. C.$_2$	16.19	22.4	
	Q.	16.09$_1$	23.7$_2$	
	Ay. 64	15.99	24.2	
	Ay. 70	15.93	22.9	
	Ay. 71	. .	21.9	
	Ad.	16.04	23.1	
535	Arg.	1 38 43.72	63 14 3.4	
	Yarn.	43.80$_2$	3.6	
	Wn. 67	43.68$_2$	3.1$_2$	
	Ay. 72	43.62$_1$	3.2	
	Ad.	43.72	3.4	
564	St.	1 45 25.33	63 3 11.6	Weight: St., 4; Arm., R. C.$_2$, 1; Q., $\frac{3}{4}$; the others, 2 each.
	Arm.	25.28	11.2	
	R. C.$_2$	25.18	11.1	
	Q.	25.38$_2$	11.0$_2$	
	Main	25.33	11.5	
	Ay. 71	25.26$_{11}$	11.5	
	Leid.	. .	11.5	
	Ad.	25.30	11.5	
568	Mädl.	1 46 18.79	68 4 10.8	Weights to Ay. 60 and Ay. 64 (in decl.), 2 each.
	Arm.	19.05$_2$	11.4	
	Ay. 60	19.17	11.5	
	Ay. 64	18.98	11.3	
	Ay. 72	18.99$_2$	13.2$_2$	
	Ad.	18.95	11.6	
588	Ay. 40	1 50 25.89	64 0 44.1	Lal. agrees very nearly, giving 25^s.80, 43″.5.
	R. C.	25.86	44.2	
	Arm.	25.99	43.0	
	Sm. 59	26.18	43.6	
	Sm. 64	.	42.7	
	Sm. 68	. .	42.1	
	Pulc. 62	25.94	43.2	
	Ad.	25.97	43.3	
610	Mädl.	1 53 34.93	64 17 47.9	
	H.	. .	47.9	
	Arm.	35.11$_1$	47.3	
	Ay. 64	35.08	47.8	
	Wn. 67	35.20	47.6	
	Ad.	35.08	47.6	
611	Mädl.	1 53 46.14	63 47 5.5	
	H. 43	. .	6.0	
	Arm.	46.47$_2$	6.5	
	Q.	46.12$_1$	5.8$_2$	
	Ay. 73	46.23$_1$	6.1$_1$	
	Ad.	46.24	6.1	
620	Mädl.	1 55 [17.83]	64 30 2.7	c. — o.: Auwers + 1″.6 (1 obs.); Gr. — 0″.4; Bessel 1815 — 0″.4. P. M. used — 0″.06.
	R. C.	17.16	3.9	
	Arm.	17.49	5.6	
	Sm.	17.72	4.5	
	Ad.	17.46	4.7	

DETAILS OF POSITIONS—DIVISION IV.

DECLINATIONS

OF THE

LAKE SURVEY CATALOGUE REVISED.

No.	Authority.	Declination.
		° ′ ″
Gr. 1854	R. C.	39 19 49.0
	Arm.	48.8
	Ad.	48.9
4108	Arm.	57 45 2.5
	R. C.	1.5
	Pulc.	1.9
	Ay. 64	2.0
	Ad.	2.0
4121	Arm.	54 07 48.6
	Pulc.	49.0
	Wn. 67	48.8
	Ay. 71	49.4_1
	Ad.	48.9
4123	St.	57 43 38.2
	R. C.	38.5
	Yarn.	37.4
	Ay. 69	38.6
	Leid.	38.3
	Eng.	37.7
	Ay. 72	38.5_9
	Main	37.8_{14}
	Ad.	38.2
4126	St.	41 21 22.2
	Main	20.7
	Pulc.	21.9
	Ad.	21.8
4128	T.	33 45 36.0
	H.	38.9
	Arm.	37.4
	Pulc.	37.4
	Yarn.	37.9
	Ay. 60	38.7
	Ad.	37.8
4148	Arm.	49 40 40.4
	R. C.	42.9
	Pulc.	41.6
	Ay. 64	40.9
	Yarn.	40.9_2
	Ad.	41.4
Gr. 1867	R. C.	38 35 47.9
	Ay. 50	47.0
	Ad.	47.4
4159	R. C.	58 33 36.7
	Pulc.	37.4
	Ay. 12-yr.	37.7
	Arm.	37.6
	R. $C._2$	35.6
	Ad.	37.1
4177	R. C.	43 14 7.8
	Arm.	6.8
	Yarn.	7.0
	Ay. 64	7.0
	Ad.	7.1
4180	Arm.	52 15 16.6
	R. C.	17.4
	Ay. 64	17.9
	Paris 64	17.3
	Ad.	17.3
4185	Mädl.	57 28 14.8
	Arm.	15.3
	Pulc.	16.2_2
	Ad.	15.4
4188	St.	39 42 44.2
	Pulc.	43.5
	Ad.	43.9
4194	Arm.	55 51 4.3
	Pulc.	5.8
	R. C.	4.3
	R. $C._2$	3.6
	Ad.	4.5
Gr. 1894	R. C.	42 2 51.1
	H.	51.6
	Pulc.	51.6
	Ad.	51.4
4203	12-yr.	56 24 17.5
	R. C.	16.9
	Arm.	17.4
	Pulc.	18.8
	Yarn.	17.7
	Ad.	17.7
4216	St.	59 5 37.3
	Pulc.	36.9
	Ad.	37.1
4217	Arm.	52 13 30.8
	R. C.	31.4
	Yarn.	30.7
	R. $C._2$	32.5_1
	Ay. 73	33.8_1
	Ad.	31.5
4219	Rü.	59 27 34.5
	R. C.	34.0
	Arm.	34.0
	Ja.	35.2
	Pulc.	33.3
	Ad.	33.7
Gr. 1903	Arg.	53 45 41.6
	H.	41.6
	Pulc.	41.2
	Ad.	41.5
4233	T.	33 56 18.7
	H.	20.5
	Arm.	20.5
	Main	19.2
	Ay. 64	18.9
	Ad.	19.5
4235	St.	42 2 13.5
	Ay. 68	12.9
	Pulc	12.7
	Ay. 70	13.4
	Main	12.5
	Ad.	13.1
4244	Y.	37 6 52.6
	Ja.	52.5
	R. $C._2$	51.2
	Main	52.5
	Sm.	53.1
	Ad.	52.4

4128. P. M. — 0″.07, from Pi.
4188. St. corrected for Auwers's Bradley.
4233. Main's observation of 1870 gives 23″.8 and is excluded.

No.	Authority.	Declination.		
		°	′	″
Gr. 1907	R. C.	40	23	23.4
	Bonn.			24.8$_1$
	Ad.			23.9
4258	12-yr.	41	33	45.6
	R. C.			43.8
	6-yr.			46.5$_2$
	Kbg.			46.8$_2$
	Ad.			45.5
4282	H.	44	47	15.6
	Ay. 45			15.2
	R. C.			15.5
	Ja.			16.8
	Yarn.			14.6$_2$
	Ad.			15.6
Arg. 124	Arg.	52	27	1.2
	Ad.			1.2
4285	Arm.	39	57	30.8
	12-yr.			31.0
	R. C.			30.0
	Yarn.			29.3
	R. C.$_2$			29.3
	Wn. 67			30.3
	Ay. 71–72			30.2
	Ay. 73			30.7
	Ad.			30.2
4287	H.	46	7	26.8
	R. C.			26.3
	Ja.			27.2
	Arm.			26.0
	Ay.			26.4
	LeV.			26.7
	Ad.			26.6
Gr. 1925	R. C.	50	50	24.4
	H.			24.5
	Rü.			[22.9]
	Pulc.			24.6
	Ad.			24.5
4303	Arm.	49	8	55.0
	Ay. 60			54.1
	R. C.$_2$			53.9
	Yarn.			54.2
	Ad.			54.5
4311	R.	38	11	50.9
	H.			50.9
	R. C.			50.7
	Arm.			49.9
	Ja.			50.5
	Ay.			50.4
	Yarn.			50.4
	Wn.			50.9
	Ad.			50.6
4335	St.	56	38	18.3
	R. C.$_2$			17.8
	Ay. 72			19.4
	Main			18.3
	Ad.			18.4
4341	H.	47	52	31.2
	R. C.			30.2
	Ja.			28.9
	Ad.			30.1

No.	Authority.	Declination.		
		°	′	″
4345	Ja.	38	59	23.6
	Ay. 60			24.6
	R. C.$_2$			23.8
	Ay. 64			24.3
	Yarn.			24.0
	Ay. 68			24.4
	Ay. 72			25.3$_1$
	Ad.			24.0
4348	Arm.	54	46	34.4
	R. C.$_2$			34.4
	Ay. 64			35.1
	Ay.			34.7
	Main			35.4
	Ad.			34.8
Gr. 1938	R. C.	44	13	43.0
	Arm.			43.2
	Ad.			43.1
4350	Pulc.	46	51	19.2
	H.			19.4
	R. C.			18.6
	Ja.			17.8
	Ad.			18.8
4360	Pulc.	31	27	34.5
	Arm.			34.8
	Yarn.			32.9
	Ay. 60			35.4
	Ay. 67–73			35.7
	Ad.			34.6
4366	Arm.	57	2	24.1
	R. C.			24.1
	R. C.$_2$			24.9
	Ay. 60			25.6
	Yarn.			23.3
	Ad.			24.4
4384	Arm.	36	28	5.1
	Ay. 60			5.1
	Ay. 64–69			5.5
	Leid.			5.4
	Eng.			6.0
	Ay. 70–1–2			5.9
	Ad.			5.4
4389	H.	45	56	14.7
	R. C.			13.0
	Arm.			13.6
	Ja.			14.7
	Ad.			14.0
4407	R.	38	5	24.2
	12-yr.			23.4
	R. C.			23.5
	Ja.			23.0
	Ay. 69			22.3
	Wn.			22.6
	Leid.			22.6
	Eng.			22.4
	Ay. 70			22.7
	Ad.			22.8
4408	Arm.	39	12	0.8
	R. C.			1.4
	Pulc.			0.7
	Ay. 64			1.3
	Ad.			1.1

No.	Authority.	Declination.		
		°	′	″
4414	Pulc.	39	23	24.1
	R. C.			24.2
	Arm.			26.0_2
	Ay. 64			24.1
	Ad.			24.4
4415	St.	39	9	50.2
	Ay. 64			49.5
	Wn.			50.0
	Pulc.			48.8
	Ad.			49.6
4416	T.	57	29	53.8_1
	Rü.			[50.5]
	H.			53.3
	R. C.			53.3
	Arm.			54.2
	Q. 63			51.9_1
	Ad.			53.4
4420	Arm.	41	27	26.9
	R. C.			27.2
	R. C_2			27.0
	Ay. 64			27.6
	Ad.			27.2
4433	T.	40	48	55.4
	Ay. 45			54.3
	H.			54.3
	R. C.			55.2
	Arm.			53.9
	Ay. 60			55.6
	Yarn.			55.0
	Ad.			54.8
4438	Arm.	41	30	55.7
	R. C.			57.1
	Pulc.			56.5
	Ay. 64			57.0
	Ad.			56.6
4451	St.	41	13	53.0
	Ay. 69			52.7
	Ay. 70			53.3
	Leid.			52.4
	Eng.			52.2
	Pulc.			51.8
	Ad.			52.5
4453	T.	34	45	24.0
	H.			23.7
	Arm.			24.4
	Main			23.3
	Ad.			23.8
4456	Arm.	50	20	24.0_1
	R. C.			24.7
	Pulc.			24.3
	Ou.			23.8
	Ay. 60			23.0
	Ad.			24.0
4457	Rü.	35	47	5.8
	Ja.			6.6
	Arg.			6.1
	Main			6.0_2
	Smyth			6.7
	Ad.			6.3
4467	Arm.	40	48	24.7
	R. C.			26.2
	Pulc.			26.8
	Ay. 64			26.6
	Ad.			26.1

No.	Authority.	Declination.		
		°	′	″
Gr. 1979	Rü	38	30	46.0_1
	R. C.			45.7
	Arm			45.1
	Ad.			45.5
XIII, 71	T.	44	33	27.0
	R. C.			27.0
	Pulc.			27.4
	Ad.			27.2
4479	R. C.	37	41	15.2
	Arm.			13.8
	Ja.			14.1
	Yarn.			12.6
	Ay. 68			13.8
	Ad.			13.9
4484	Pulc.	55	34	43.1
	Ay.			43.2
	Yarn.			43.0
	Ay. 69			43.1
	Main			41.9
	Leid.			43.2
	Eng.			42.3
	Main 72			42.1
	Ad.			42.8
4486	Ay. 60	55	34	30.6
	R. C_2			30.9
	Ay. 64			31.0
	Wn.			31.9
	Yarn.			31.0
	Ay. 68–73			31.7
	Ad.			31.1
4493	Ay. 60	55	38	22.7
	R. C_2			22.5
	Yarn.			22.4_2
	Ay. 69			23.4
	Ay. 64			22.7
	Ad.			22.8
Gr. 1991	H.	46	40	45.4
	Rü.			45.2
	R. C.			45.7
	Ad.			45.4
Gr. 1994	H.	41	22	49.4
	R. C.			48.3
	Pulc.			48.3
	Ad.			48.7
4519	R.	42	44	59.2
	H.			60.5
	R. C.			60.0
	Ja.			58.7
	Ay.			60.1
	Wn.			60.0
	Yarn.			[57.6]
	Ad.			59.8
4536	St.	37	49	23.9
	Yarn.			24.1
	Pulc.			23.5
	Ay. 71			25.1_2
	Ad.			23.9
4540	R. C.	55	59	22.3
	Arm.			22.4
	6-yr			22.4_2
	Wn.			21.7
	Ad.			22.2

No.	Authority.	Declination.		
		°	′	″
4538	12-yr.	49	39	19.9
	R. C.			20.2
	Arm.			19.4
	Ay. 60			20.0
	R. C_2			19.0
	Ad.			19.7
4545	Gr.	44	50	11.9
	H.			13.8
	Pulc.			12.7
	R. C.			12.6
	Ja.			12.5
	Wn.			12.1
	Ad.			12.6
4550	R. C.	53	19	35.3
	Arm.			36.0
	Wn.			36.8
	Sm.			36.4
	Main			36.8
	Ad.			36.3
4552	Rü.	36	55	[50.6]
	Ay. 45			52.1
	H.			52.9
	Ay. 50			52.7
	Ja.			52.4
	Yarn.			[49.9_2]
	Paris			53.0
	Ay. 73			52.6
	Ad.			52.7
4555	R. C.	53	13	50.1
	Arm.			50.1
	R. C_2			50.8
	Sm.			51.1
	Ad.			50.5
4556	T.	51	21	6.5
	Rü.			4.5
	H.			4.8
	R. C.			5.2
	Arm.			8.0
	Ad.			5.8
4564	R. C.	53	33	12.8
	Arm.			12.7
	R. C_2			13.2
	Ay. 64			14.0
	Ad.			13.2
Gr. 2030	H.	57	50	23.6
	Rü.			23.3
	R. C.			22.9
	Pulc.			23.8
	Ad.			23.4
4568	Arm.	55	18	50.7
	R. C.			52.7
	Ay. 60			53.6
	Paris 64			53.2
	Main 71			52.2_{10}
	Ad.			52.8
Gr. 2032	H.	42	18	18.3
	Rü.			18.3
	R. C.			16.4
	Pulc.			17.4
	Ad.			17.6

No.	Authority.	Declination.		
		°	′	″
XIII, 189	T.	52	41	36.7
	H.			36.1
	R. C.			36.5
	Arm.			35.3
	Pulc.			36.6
	Ad.			36.3
Arg. 142	Arg.	56	31	8.4
	Pulc.			9.0
	Ad.			8.6
4592	T.	31	31	37.1
	Main			36.3
	Ad.			36.7
4595	R. C.	39	7	50.5
	Ja.			47.7
	Yarn.			49.5_2
	Ad.			49.2
4596	Gr.	41	42	58.8
	Ay.			59.1
	H.			58.6
	R. C.			58.3
	Ja.			59.4
	Wn.			58.2
	Ad.			58.7
4600	Rü.	39	10	8.4
	H.			8.5
	R. C.			7.6
	Ja.			7.3
	Ad.			7.9
4605	Arm.	55	3	27.7
	R. C.			27.0
	Yarn.			27.6
	R. C_2			28.1
	Ay. 73			27.9_1
	Ad.			27.6
4609	H.	42	40	24.7
	R. C.			23.2
	Wn.			22.3
	Ad.			23.5
4610	H.	31	48	42.6
	Ja.			43.0
	Arg.			42.0_2
	Sm.			43.6
	Yarn.			42.0_2
	Main			43.3
	Ad.			42.8
4627	Rü.	35	23	35.2_2
	H.			33.5
	Arm.			34.1_1
	Ja.			33.3
	Sm.			33.1
	Ad.			33.7
4628	H.	35	17	10.9
	Arm.			11.0
	Pulc.			11.1
	Ja.			9.6
	R. C_2			10.0_1
	Sm.			10.2
	Ay. 72			9.2
	Ad.			10.1

No.	Authority.	Declination.		
		°	′	″
Gr. 2056	R. C.	59	9	32.6
	Rü.			29.6
	Pulc.			32.1
	Arm.			31.4
	Oom.			31.1
	Ad.			31.4
4632	Ja.	35	3	51.4
	Ay. 64			50.9
	Main			51.6
	Sm.			49.7$_1$
	Yarn.			51.4
	Ad.			51.3
Gr. 2057	R. C.	40	57	18.4
	Rü.			16.6
	Arm.			18.1
	Ad.			17.7
Gr. 2058	R. C.	42	48	2.7
	Arm.			2.8
	Ad.			2.7
4649	Arm.	54	20	37.5
	Ay. 40			38.0
	Ay. 45			37.5
	R. C.			37.2
	R. C.$_2$			36.5
	Ad.			37.4
4652	Yarn.	32	38	33.7
	Ja.			35.4
	R. C.$_2$			34.6
	Sm.			39.7
	Ad.			35.8
4676	Ja.	32	10	11.6
	Main			11.3
	Sm.			11.5
	Main			11.9
	Ad.			11.6
4678	Ja.	32	15	47.8
	Q. 57			49.5
	Main			49.4
	Sm.			49.2
	Ad.			49.0
XIII, 289	T.	46	21	36.3
	H.			36.6
	Arm.			35.4
	Pulc.			35.8$_1$
	Ad.			36.0
4684	T.	51	34	23.1
	Rü.			27.0
	R. C.			24.8
	Arm.			25.9
	Ay. 12-yr.			25.1
	Ad.			25.0
4694	Ja.	31	26	54.6
	Arm.			53.8
	Yarn.			53.2
	Sm. 60			55.5
	Sm. 63			54.9
	Main			53.7
	Wn. 67			53.5
	Sm. 69			52.5
	Wn. 73			55.1
	Ad.			54.2

No.	Authority.	Declination.		
		°	′	″
Gr. 2077	R. C.	42	41	41.0
	Rü.			39.4
	Arm.			40.6
	Ad.			40.5
4699	Pi.	44	26	59.7
	Gr.			58.6
	H.			59.7
	Arm.			59.7
	Ay. 64			58.8
	Wn.			58.8
	Leid.			59.3
	Eng.			59.2
	Ay. 70			59.3
	Ad.			59.3
4701	Arm.	50	2	57.3
	Leid.			58.2
	Eng.			58.3
	Ay. 69			58.5
	Ay. 71			58.5
	Wn. 73			57.3
	Ad.			58.0
Gr. 2082	R. C.	59	55	49.6
	Arm.			50.2
	Bonn.			48.3$_1$
	Ad.			49.6
4714	T.	32	53	4.2
	Arm.			2.8
	Main			3.6
	Wn.			3.1
	Ad.			3.4
Gr. 2084	R. C.	59	8	23.5
	Oom.			22.5
	Ad.			22.8
4725	Ad.	52	22	22.7
4726	Arm.	52	22	28.0
	12-yr.			30.2
	R. C.			30.4
	Ay. 60			29.1
	R. C.$_2$			29.2$_1$
	Main			30.6
	Ad.			29.4
4728	H.	42	6	22.8
	R. C.			22.8
	Arm.			20.7
	Ja.			23.2
	Wn.			21.8
	Ay. 72			22.8$_1$
	Ad.			22.5
4736	Ay. 40	53	7	3.8
	R. C.			3.3
	Ja.			3.0
	Ad.			3.4
4738	H.	40	19	29.9
	R. C.			29.2
	Ja.			30.8
	Sm.			30.5
	Ad.			30.1

4684. Confirmed by Wn. 73, 74.
XIII, 289. There may be enough P. M. to make the declination uncertain.
4694. The P. M. adopted is $-0''.11$; C. $-$ O.: Lal. $+1''.7$; B. Z. $-4''.3$.
Gr. 2077. Half weight to Rü.
4725. From following star by observed differences, using Dembowski's measures.
4726. The adopted value needs a correction of $+0''.3$.

No.	Authority.	Declination.		
		°	′	″
4741	Pulc. V. C.	46	39	46.9
	Ay. 69-70			47.1
	Leid.			47.3
	Eng.			47.1
	Ad.			47.1
4742	St.	51	56	40.1
	R. C.$_2$			41.4$_1$
	Main			39.8
	Ad.			40.1
4747	T.	36	5	11.6
	H.			13.9
	Arm.			13.2
	Yarn.			12.8
	Main			14.5
	Ay.			13.2
	Ad.			13.2
4752	R. C.	51	53	9.8
	Pulc.			9.4
	Arm.			8.2
	Ay. 64			9.6$_2$
	Ay. 68			10.0
	Ad.			9.4
4756	Ay.	52	36	35.1
	R. C.			35.5
	Ja.			36.1
	Sm.			35.1
	LeV.			35.6
	Ad.			35.6
4758	H.	39	22	11.0
	R. C.			10.1
	Ja.			8.8
	Ay. 64			9.7
	Ad.			9.9
Gr. 2102	R. C.	55	26	22.5
	Rü.			23.0$_1$
	Arm.			21.0
	Yarn.			21.8$_2$
	Ad.			22.0
4778	Rü.	37	46	24.7$_1$
	R. C.			25.4
	Ja.			24.1
	Yarn.			23.6
	Q.			23.8
	Ad.			24.3
4783	R. C.	38	57	31.1
	Ja.			30.6
	Ay. 60			31.8
	Ay. 64			32.1
	Wn.			31.9
	Ad.			31.5
4797	R.	36	45	24.6$_1$
	Yarn.			25.9$_2$
	Ja.			24.3
	Main			26.5
	Sm.			25.9
	Ay.			25.2
	Ad.			25.5

No.	Authority.	Declination.		
		°	′	″
4804	Arm.	50	24	16.3
	Pulc.			17.3
	Q.			17.8
	Ay. 60			17.6
	R. C.$_2$			18.3
	Ad.			17.5
4803	T.	32	20	53.1
	R.			52.7
	Arm.			53.5
	Wn.			54.8
	Ay. 73			54.2$_2$
	Ad.			53.6
4805	Gr.	42	21	39.0
	R. C.			40.1
	Ja.			39.1
	Ay. 60			40.2$_2$
	Ay. 64			39.5
	Wn.			38.9
	Ad.			39.4
4808	St.	30	55	16.2
	R. C.$_2$			15.6
	Ay. 64			16.1
	Ay. 69			15.6
	Eng.			15.6
	Arg.			16.4
	Main			15.6
	Ay. 71			15.8
	Ad.			15.9
4812	St.	38	51	21.1
	R. C.$_2$			20.2
	Wn.			22.0
	Main			20.7
	Ad.			21.0
4816	Gr.	37	30	46.3
	R. C.			44.8
	Ja.			46.1
	Wn.			45.5
	Yarn. 72			45.9$_1$
	Ad.			45.5
4820	Rü.	33	5	0.4
	Ja.			0.8
	Main			2.1
	Sm.			1.3
	Ad.			1.2
4823	Pulc.	30	17	21.2
	Arm.			21.2
	Ay. 60			21.4
	Yarn.			20.2$_2$
	R. C.$_2$			23.4
	Ad.			21.5
4825	Pj.	37	10	33.9
	T.			34.5
	H.			34.1
	Arm.			33.9
	Main			35.5
	Ay. 73			33.6
	Ad.			34.2
4826	Ad.	53	26	58.5

4826. See Introduction, where the star is investigated in detail.
4825. P. M. used — 0″.05; not given in catalogue.

No.	Authority.	Declination.		
		°	′	″
4827	Rü.	47	20	5.8
	Ay. 45			6.4
	R. C.			3.7
	Ja.			5.9
	Wn.			5.6
	Ad.			5.5
4830	C. A.	49	54	49.1
	H.			49.0
	R. C.			48.9
	Ja.			49.5
	Yarn.			49.3
	Q.			49.7
	Ou.			50.2
	Ad.			49.4
4841	Gr.	44	10	56.4
	R.			55.8
	Ay.			56.4
	R. C.			56.1
	Ja.			55.4
	Yarn.			55.7
	Ay. 67			56.1
	Ad.			56.0
4843	St.	44	56	42.2
	Pulc.			41.3
	Ad.			41.7
4845	T.	54	33	51.3
	R.			51.8
	H.			52.3
	R. C.			51.8
	Arm.			53.0
	$R. C._2$			51.2
	Ad.			51.9
4863	Ja.	37	17	23.9
	Main			24.3
	Sm.			24.5
	Ad.			24.2
4870	Ay. 45	40	59	22.0
	R. C.			21.8
	Ja.			21.0
	Ad.			21.6
4881	T.	45	42	55.6
	R. C.			55.1
	Arm.			56.7
	$R. C._2$			54.3
	Ad.			55.4
4885	Pi.	42	54	26.9
	Gr.			26.9
	T.			25.8
	R. C.			27.6
	Wn.			26.7
	Ad.			26.8
4897	Arg.	38	19	38.1
	Wn.			38.0
	Ad.			38.1
4903	R. C.	46	38	15.8
	Arm.			17.1
	LeV. 64			16.8
	Ad.			16.1

No.	Authority.	Declination.		
		°	′	″
4907	H.	49	14	6.9
	R. C.			7.8
	Arm.			7.1
	Ou.			8.3
	Ay. 6-yr.			8.2
	Main			9.2
	Ad.			7.9
Gr. 2157	R. C.	51	53	34.1
	Rü.			34.5_1
	Wn.			33.9_1
	Ad.			34.2
4906	Arg.	37	47	9.1
	Ay. 64–68			8.8
	Ad.			9.0
4917	Rü.	46	59	31.2
	R. C.			30.4
	Ja.			29.7
	Ad.			30.4
4918	Pulc.	59	48	8.7
	Str.			10.0
	Ad.			9.7
4934	B. A. C.	41	38	27.1
	R. C.			26.5
	Ja.			27.0
	Sm.			27.2
	Ad.			26.9
4937	Gauss	50	8	25.9
	Hansen			25.9
	Arg.			25.3
	Pulc.			26.6
	Yarn.			23.5_2
	Ad.			25.3
4942	R. C.	40	8	30.9
	Ja.			30.8
	Ay. 64			31.6
	Sm.			32.5
	Ad.			31.4
4943	R. C.	39	45	43.6
	Arm.			42.8
	Pulc.			43.5
	Ay. 60			43.5
	Ad.			43.4
4952	Rü.	47	46	19.4_1
	R. C.			18.0
	Ja.			20.0
	Ad.			19.1
4961	Ay. 45	35	41	46.3
	H.			46.7
	Arm.			46.8
	Ad.			46.6
4965	Rü.	45	8	4.2
	Ay.			2.1
	R. C.			3.1
	Ja.			2.4
	Sm.			2.3
	Ad.			2.8

No.	Authority.	Declination.	No.	Authority.	Declination.
		° ′ ″			° ′ ″
4974	C. A.	48 8 29.2	5061	Arm.	30 4 14.9
	P. M.	29.3		Ay. 64	14.3
	Pulc.	30.1		Ay. 72	15.0
	R. C.	28.9		Main	14.3
	Arm.	28.2		Ad.	14.6
	Q. 57	30.1			
	Q. 59	29.6$_1$	Arg. 164	Arg.	41 25 50.2
	R. C.$_2$	29.0			
	Ay. 60	29.3	5064	T.	50 40 1.2
	Main 72	31.1$_1$		R. C.	2.7
	Ad.	29.2		R. C.$_2$	2.7
				Yarn.	2.1
4980	R. C.	48 38 5.5		Wn.	0.6
	Arm.	4.3		Ad.	1.9
	R. C.$_2$	4.4			
	Leid.	5.1	5071	H.	52 24 34.5
	Ad.	4.9		R. C.	34.5
				Ja.	34.9
4992	H.	55 2 17.8		Sm.	34.5
	R. C.	17.8		Ad.	34.6
	Ja.	17.4			
	Sm.	17.3	5072	Arm.	33 22 56.5
	Ad.	17.6		Ay. 64	55.2
				Main	56.5
5000	Rü.	33 33 12.2$_1$		Ay. 71	55.6
	Ja.	12.6		Ad.	56.0
	Main	12.3			
	Main 71–73	12.8	5075	Arm.	30 44 25.5
	Sm.	12.9		Q.	24.8
	Ad.	12.7		R. C.$_2$	24.9
				Main	26.7
5019	Rü.	49 9 51.4		LeV.	25.6
	R. C.	52.6		Ad.	25.5
	Ja.	50.8			
	Ay. 60	53.0	5076	Rü.	40 1 45.3
	Ad.	51.9		H.	44.6
				R. C.	42.8
Gr. 2202	R. C.	49 2 52.8		Ja.	43.5
	Ay. 45	52.3$_1$		Ad.	44.0
	Ay. 60	53.0			
	Ad.	52.9	5077	Ay.	52 47 30.7
				R. C.	30.2
5026	Rü.	38 44 1.8		Ja.	29.4
	R. C.	3.1		Ad.	30.1
	Ja.	3.3			
	Ay. 64	2.0	Gr. 2227	T.	37 47 15.0
	Ad.	2.7		Rü.	14.5
				R. C.	16.0
5033	Ay.	42 38 15.5		Ay. 45	15.5$_2$
	R. C.	16.1		Ay. 50	14.6
	Ja.	14.4		Arm.	12.9
	Wn.	15.2		Ja.	14.4
	Ad.	15.3		Yarn.	14.3
				Ad.	14.6
5036	St.	33 46 56.5			
	R. C.$_2$	55.8	5092	Ay. 40	47 30 8.3
	Ay. 64	56.2		R. C.	7.2
	Ay. 69	55.8		Ja.	9.1
	Ay. 73	56.4		Ad.	8.2
	Main 72	55.6			
	Yarn.	56.7	XV, 81	T.	34 46 17.8
	Ad.	56.4		Arm.	18.6
				H.	17.2
XV, 39	T.	51 24 6.9		Pulc.	18.4
	R. C.	6.8		Ad.	18.0
	Arm.	5.5			
	Bonn.	7.3	Gr. 2232	R. C.	44 44 25.3
	Ad.	6.5		Rü.	25.5
				Yarn.	25.9$_2$
				Bonn.	26.8$_1$
				Ad.	25.8

Gr. 2202. P. M. + 0″.06 from Gr.
Gr. 2227. P. M. + 0″.17; C. — O: Pi. — 1″.4; Gr. + 0″.8.
5092. Declination doubtful.

No.	Authority.	Declination.		
		°	′	″
5097	St.	59	24	16.6
	Nyrén			16.1
	Leid.			16.7
	Eng.			15.6
	Main			16.0
	Ay. 72			16.6
	Ad.			16.3
Gr. 2237	Rü.	39	9	23.2
	R. C.			23.3
	Ay. 45			23.7
	Yarn.			23.0_2
	Ad.			23.5
5113	Rü.	48	8	35.2
	R. C.			36.0
	Ja.			35.2
	Ad.			35.5
Arg. 167	Arg.	57	52	9.0
5122	Pulc. V. C.	41	15	35.8
	Pulc. M. C.			36.4
	Ay. 60			37.0
	Yarn.			35.7
	Pulc. V. C.			35.9
	Ad.			36.1
5130	Pulc. V. C.	41	19	28.2
	Pulc. M. C.			28.0
	Yarn.			26.7
	Ay. 60			28.5
	Ad.			27.9
5131	Pulc. V. C.	31	46	56.4
	Ay. 60			56.9
	Ad.			56.7
5155	Arm.	39	25	34.2
	Yarn.			33.8
	Ay. 60			34.4
	Wn. 72			35.0
	Ad.			34.4
5157	R. C.	43	34	56.8
	Ja.			55.1
	Ay. 64			56.9
	Kön.			57.8
	Wn.			56.5
	Ad.			56.6
5164	Ay. 45	50	6	51.4
	R. C.			51.0
	Ja.			50.9
	Ad.			51.1
R.C.3416	R. C.	40	12	54.2
	Wn.			53.8
	Ad.			54.0
5168	St.	40	45	42.2
	Pulc.			40.5
	Ad.			41.3
5175	Ay. 45	44	0	45.0
	R. C.			44.8
	Ja.			45.1
	Wn. 72			45.5
	Ad.			45.1

No.	Authority.	Declination.		
		°	′	″
5177	T.	47	12	39.2
	H.			38.5
	R. C.			37.2
	Arm.			36.6
	$R. C._2$			37.3
	Wn. 67			38.3
	Ad.			38.0
Gr. 2260	R. C.	54	55	8.2
	Pulc.			8.7
	H.			7.9
	Ad.			8.3
5178	St.	37	2	33.3
	Yarn.			32.5
	$R. C._2$			33.4
	Main			34.0
	Ay. 69			32.9
	Ad.			33.2
5181	H.	50	49	54.4
	R. C.			55.3
	Ja.			[52.0]
	Ou.			54.4
	Wn.			53.8
	Ad.			54.5
5204	Pulc.	32	54	40.5
	Arm.			42.3
	Ay. 60			42.6
	Ay. 64			41.9
	Main			41.4
	Ad.			41.8
5210	Ay. 40	52	45	21.2
	H.			22.7
	Ay. 45			22.5
	R. C.			21.6
	Pulc.			22.6
	Leid.			21.7
	Ay. 70			22.5
	Ad.			21.9
R.C.3453	H.	55	51	28.8
	R. C.			27.7
	Ad.			28.3
5248	H.	55	45	36.9
	R. C.			35.8
	Arm.			35.5
	Ja.			36.0
	Ad.			36.0
5259	Pulc.	36	2	45.5
	Arm.			44.8_1
	Q.			46.6
	Ay. 60			46.5
	$R. C._2$			47.4
	Wn.			47.7_1
	Ad.			46.4
5271	See Introduction, p. 13.			
5279	H.	56	11	48.5
	Ay. 45			49.1
	R. C.			49.3
	Ay. 50			49.2
	Ja.			[46.3]
	Wn. 72			48.3
	Ad.			48.9

No.	Authority.	Declination.
		° ′ ″
5287	Pulc.	43 30 12.5
	R. C.	13.3
	Arm.	[9.8_2]
	R. $C._2$	12.6
	Yarn.	11.3
	Ad.	12.4
5295	Pulc.	38 18 32.1
	Arm.	32.3
	Yarn.	33.0
	Ay. 64	32.2
	Ad.	32.4
5298	Ay. 12-yr.	42 55 49.9
	R. C. -	50.4
	Arm.	51.5
	Pulc.	50.6
	Yarn.	49.7
	Ad.	50.4
5307	R. C.	59 16 22.4
	Ja.	20.4
	Oom. -	21.7
	LeV. -	21.7
	Wn. -	22.1
	Ad.	21.7
5310	T.	36 59 57.9
	H.	58.3
	Arm.	58.1
	Ay. 64	58.6
	Main	58.8
	Yarn. -	58.5_2
	Main 71	57.8
	Wn. 72 -	58.5_2
	Ad.	58.3
5313	St. -	55 6 12.8
	Pulc.	12.7
	Ad.	12.7
5316	R. C.	50 14 18.3
	Ja.	[16.3]
	Ou.	19.2
	Ad.	18.8
5319	Arm. -	33 40 54.2
	Ay. 60	54.8
	R. $C._2$	53.9
	Ay. 64	54 6
	Ay. 68	53.7
	Ay. 71	54.2
	Ad.	54.3
5321	Arm.	30 12 7.7
	Main	7.3
	Wn. - -	7.1
	Main 71	7.2
	Ad.	7.3
5336	T.	36 58 38.9
	H.	40.4
	Arm.	39.8
	Ay. 64	39.3
	Main	40.2
	Yarn.	40.7
	Ay. 72	40.4_1
	Ad.	40.0
5338	Arm.	46 23 4.1
	Ay. 60	4.7
	Boun.	4.3_1
	Wn. 72 -	4.2
	Main	3.8
	Ad.	4.3
5341	R. C.	53 15 49.0
	Ja.	48.2
	Ad.	48.7
5348	St. -	58 53 58.6
	R. $C._2$	58.3
	Oom.	58.4
	Ay. 69 -	58.6
	Leid.	58.5
	Paris -	58.9
	Ay. 72–3	59.0
	Ad.	58.6
5385	Arm.	36 48 34.1
	Q. - -	34.7
	Ay. 60 -	35.0
	R. $C._2$ -	34.3
	Ay. 64 -	34.7
	Paris	34.9
	Ay. 69	34.7
	Ay. 72	35.7
	Yarn.	34.5
	Ad.	34.7
5388	St.	45 15 49.0
	R. C.	48.4
	Main	48.4
	Ad.	48.8
5400	Arm.	44 9 12.6
	R. $C._2$	12.5
	Wn.	13.2
	Ad.	12.7
5415	R. C.	58 15 50.2
	Sm. -	51.4
	Sm. 72	50.2
	Main	49.3
	Ad.	50.3
5411	T.	36 44 56.8
	H.	57.5
	Arm.	56.3
	Main -	57.5
	Ay. 72–3	56.0
	Ad.	56.5
5417	R. C.	42 41 45.2
	Ja.	45.0
	LeV.	44.6
	Ad.	44.9
5432	Arm.	34 10 35.9
	Q.	34.8
	R. $C._2$	34.8
	Main -	35.0
	LeV. -	34.0
	Ay. 72–3	36.0_2
	Ad.	34.9
Gr. 2325	T.	53 32 55.3
	Arm.	54.1
	R. C.	53.8
	Yarn.	54.3
	Ad.	54.3

Gr. 2325. I think the southerly motion indicated is genuine.
5415. Two additional observations of Main give 53″.0; with them I should adopt 50″.7.

No.	Authority.	Declination.	No.	Authority.	Declination.
		° ′ ″			° ′ ″
5460	H	40 0 32.7	5523	Pulc	42 9 28.7
	R. C.	31.9		12-yr.	29.2
	Ja.	30.1		Ay. 60	29.4
	Yarn.	30.7		Yarn.	27.8
	Ad.	31.4		Ad.	28.8
5461	R. C.	49 20 16.3	Gr. 2351	R. C.	51 40 54.0
	Ja.	16.7		Pulc.	55.4
	Wn.	16.4		H.	55.3
	Ad.	16.5		Ad.	54.9
5463	St.	46 36 43.0	5535	T.	49 14 3.6
	Ay. 64	43.2		R. C.	3.3
	Ay. 68	41.4		Arm.	4.2
	Ay. 70	42.9		Ad.	3.7
	Ad.	42.8			
			Gr. 2354	Arg.	48 13 56.9
5473	Arm.	31 11 1.2		Ad.	56.9
	Ay. 60	0.8			
	Ay. 69	0.2	5534	Pulc.	33 46 58.6
	Wn. 72	0.3		Yarn.	56.5
	Ad.	0.6		Ay. 64	57.8
				Main	59.4
5479	T.	34 5 39.4		Ad.	58.1
	Ay. 45	41.0			
	Ay. 60	40.6	5541	Arm.	30 45 44.0
	Ad.	40.4		Ay. 64	44.1
				Yarn.	43.7
5480	T.	33 59 44.2		Main	45.2
	Ay. 45	44.6		Ay. 72	45.4
	Arm.	43.7		Ad.	44.6
	Ad	44.2			
			5546	T.	38 20 58.3
5484	Arm.	32 37 34.5		H.	58.3
	Q.	34.3		R. C.	58.8
	Ay. 60	32.9		Arm.	59.3
	Ay. 64	33.1		Yarn.	57.6
	Main	34.2		Ad.	58.5
	Wn.	33.3			
	Ad.	33.7	5549	Rü.	50 24 19.3
				R. C.	21.3
5496	Arm.	37 40 47.2$_1$		Ja.	18.9
	Ay. 60	47.3		Ou.	20.7
	Ay. 64–71	47.3		Yarn.	18.4
	Ad.	47.3		LeV.	20.5
				Ad.	19.9
5497	Ay. 40	44 58 33.5			
	R. C.	34.6	5552	St.	42 41 45.1
	Ja.	32.7		Ay. 69	45.5
	Ad.	33.6		Leid.	45.3
				Eng.	45.1
5499	R. C.	52 34 29.6		Main	45.1
	Ja.	30.5		Ad.	45.2
	Ad.	30.0			
			5559	R. C.	52 29 50.6
5502	St.	55 29 23.1		Ja.	49.9
	Ay. 68	24.2		Ad.	50.3
	Pulc.	24.2			
	Ad.	23.8	5568	H.	46 52 2.1
				R. C.	1.7
5503	R. C.	52 0 1.7		Ja.	51 59.5
	Ja.	1.5		Ad.	52 1.1
	Wn. 72	1.3			
	Ad.	1.5	5574	Arm.	53 9 8.0
				Paris	7.7
5515	T.	32 58 44.5		Ay. 69	7.5
	Arm.	43.4		Leid.	7.3
	Ay. 64	42.6		Eng.	7.3
	Main	43.6		Wn. 72	6.8
	Ad.	43.5		Ad.	7.4

5497. The value on page 25 includes later observations.
5535. Without P. M. as in L. S. C. The star needs reobservation.

No.	Authority.	Declination.
		° ′ ″
5575	Arm.	53 10 35.4
	Ay. 69 -	35.0
	Main 71	36.1
	Wn. 72 -	34.8
	Ad.	35.2
5596	Arm.	49 10 25.1
	Ay. 60	25.1
	Yarn.	24.3
	Mn. -	23.8
	Ad.	24.6
5599	Ay. 45	56 15 38.0
	H.	38.8
	R. C.	39.0
	Ja.	38.5
	Ad.	38.6
5604	St.	31 49 49.9
	R. C_2	50.2
	Ay. 64	49.5
	Ay. 69	49.9
	Eng.	49.2
	Arg. -	50.2
	Leid.	50.4
	Main	50.7
	Ay. 72	49.5
	Ad.	49.9
5615	H.	36 44 42.7
	Ja. -	41.5
	Ay. 64	41.7
	Sm.	42.9
	Yarn.	40.8
	Main	42.4
	Kön.	44.8
	Ad.	42.3
5619	T.	34 16 14.0
	H.	13.9
	Pulc.	13.4
	Yarn.	11.5
	Main	13.6
	Ad.	13.2
5629	Ay. 45	55 55 14.4
	R. C.	14.2
	Ay. 50	15.6_2
	Ja.	13.8
	Ad.	14.4
5643	St.	57 0 20.9
	Eng.	20.4
	Main	20.8
	Ay. 68	21.2
	Pulc.	20.5
	Ad.	20.8
R.C.3604 =XVI 213	T.	55 32 23.9
	R. C.	26.3
	R. C_2	25.2
	Q.	26.2
	Ad.	25.4
5644	R. C.	42 27 45.9
	Ja. -	45.2
	Ay. 64	45.1
	Ad.	45.4
5658	T.	55 37 56.1
	H.	55.4
	R. C.	56.0
	R. C_2	55.3
	Ad.	55.7
5652	Arm.	30 10 50.8
	Pulc.	48.1
	Ay. 64	49.4
	Main	48.3
	Wn. 72 -	49.8
	Ad.	49.3
5667	12-yr.	46 12 7.4
	Pulc.	7.2
	R. C.	6.5
	Arm.	6.7_1
	Ay. 60	7.3
	Ad.	7.1
5666	Arm.	30 1 16.2
	Ay. 60	16.7
	Yarn.	16.0
	Wn. 72 -	16.5
	Ay. 72	15.9
	Ay. 73	15.4
	Ad.	16.1
5693	Yarn.	31 54 34.0
	Ay. 60	35.5
	LeV. 64	36.3
	Ay. 72	35.8
	Ad.	35.2
Gr. 2389	Arg. -	43 2 28.5
	Ad.	28.5
5706	T.	46 44 32.0
	H.	32.9
	R. C.	32.5
	Arm.	31.9
	Arg. -	32.9
	Yarn.	30.6
	Ad.	32.1
5731	St.	31 6 42.2
	R. C_2	41.7
	Ay. 64	42.6
	Ay. 69	42.0
	Ay. 72	42.1
	Main	42.5
	Ad.	42.2
5752	Gauss	56 52 20.5
	Ca.	21.4
	T.	21.9
	Ay. 45	21.5
	R. C.	22.0
	R. C_2	21.3
	Wn. -	21.2
	Wn. 72 -	22.2
	Ad.	21.5
5763	Arm.	35 35 29.7
	R. C_2	29.9
	Q.	32.0
	Ad.	30.5

5619. P. M. + 0″.06; c. — o.: Pi. + 0″.9.
5629. P. M. + 0″.09 from Gr., confirmed by observations in 1874 and 1875 at Washington.
R. C. 3604. P. M. — 0″.09 from Pi.
5658. Later observations indicate a correction of — 1″.
5731. Earlier observations of Main give 43″.4.
5752. The P. M. + 0″.02 agrees with Groombridge, but Piazzi is 9″ or 10″ too far south. I have re-reduced his declination and find 56° 59′ 10″.5 for 1800.0 instead of 56° 59′ 1″.5. See the note to No. 400 of the Åbo catalogue.

No.	Authority.	Declination.
		° ′ ″
Arg. 185	Arg.	47 13 47.8
	Ad.	47.8
5775	T.	43 58 59.2
	Ay. 40	59.6
	R. C.	59.7
	Yarn.	57.5
	Q.	58.8_2
	Ad.	59.0
5776	Gauss	48 58 36.7
	Hansen	38.0_1
	T.	36.8
	Arm.	37.8
	H.	37.0
	R. C.	36.2
	Sm. 59	38.0
	Sm. 66	38.1
	Ad.	37.3
5777	Pulc.	35 29 26.3
	Ja.	26.5
	Main	27.1
	Sm.	26.8
	Ad.	26.5
5785	Ay. 69	54 38 8.3
	Leid.	8.1
	Eng.	7.6
	Ad.	8.0
5788	T.	36 5 55.5
	Ay. 60	55.5
	Ay. 64	55.8_2
	Yarn.	55.4
	Ay. 71	55.4
	Ay. 73	55.7
	Ad.	55.5
5790	St.	40 40 50.5
	Pulc.	49.1
	Ad.	49.8
5797	T.	58 25 56.0
	H.	55.5
	R. C.	57.0
	Arm.	55.8
	R. C_2	55.9
	Wn. 72	56.6
	Ad.	56.1
5795	T.	51 0 4.8
	R. C.	6.5
	Yarn.	3.5
	Wn.	5.2
	Ad.	5.0
5801	Åbo and Dorpat	55 55 37.5
	T.	36.4
	H.	37.8
	R. C.	37.7
	Wn.	38.7
	Pulc.	38.8
	Ad.	37.8
5834	St.	36 57 4.8
	Ay. 69	3.7
	Leid.	3.6
	Eng.	4.3
	Ay. 72	4.3
	Ad.	4.1

No.	Authority.	Declination.
		° ′ ″
5842	Pulc.	33 14 9.4
	Wn. 72	10.1
	Ay. 72	10.1_2
	Ay. 73	10.1
	Ad.	9.9
5847	Arm.	37 25 24.2
	Q.	26.4
	Ay. 60	25.4
	R. C_2	24.0
	Ay. 64	24.9_2
	Wn.	24.4
	Main 70	24.4
	Main 72	23.2
	Ad.	24.6
5853	T.	49 49 [31.3]
	H.	33.3
	R. C.	34.1
	R. C_2	32.9
	Wn. 72	33.7
	Ad.	33.6
Gr. 2431	R. C.	38 56 25.5
	Pulc.	26.4
	H.	27.2
	Ad.	26.4
5863	Arm.	32 37 47.6
	Q.	46.5
	R. C_2	48.3
	Ay. 64	46.4
	Wn.	47.0
	Wn. 72	47.7
	Paris	48.2
	Ad.	47.5
5871	Arm.	46 21 50.9
	Pulc.	51.9
	Ay. 69	51.7
	Leid.	51.1
	Eng.	51.3
	Wn.	51.8
	Ad.	51.4
5874	H.	40 5 54.2
	R. C.	53.1
	Ja.	52.6
	Ay. 64	54.4
	Wn.	55.1
	Ad.	53.9
5886	Pulc.	37 15 43.4
	Q.	44.1
	Yarn.	42.3
	Leid.	42.9
	Eng.	43.9
	Ay. 69	43.5
	Ay. 70	44.2
	Main 70	43.3
	Ad.	43.4
Gr. 2436	R. C.	38 41 47.1
	Pulc.	48.1
	H.	49.5
	Yarn.	48.1
	Ad.	48.2

5776. P. M. used, $-0''.10$; c. — o.: (Pi.) $-1''.5$.
Gr. 2431. P. M. $+0''.07$ from Gr.

No.	Authority.	Declination.		
		°	′	″
5895	Pulc.	37	3	50.3
	Yarn.			49.6
	Ja.			50.6
	R. C_2			49.7
	Ay. 64			51.0
	Wn. 72			51.9
	Ad.			50.6
5902	T.	57	7	31.4
	H.			30.3
	R. C.			31.5
	Ad.			31.1
5911	Pulc.	48	21	57.1
	St.			56.3
	Ad.			56.9
5918	T.	58	45	24.1
	H.			23.6
	R. C.			24.3
	Arm.			24.0
	Oom.			24.0
	Ad.			24.0
5927	T.	31	15	8.7
	H.			9.1
	Arm.			8.7
	Main			9.8
	Ad.			9.1
5929	R. C.	38	58	35.6
	Ja.			35.7
	Yarn.			35.8
	Ad.			35.7
5944	H.	41	19	58.5
	R. C.			58.4
	Ja.			58.5
	Ay. 60			58.1$_1$
	Ay. 64			58.1
	Ay. 69			58.6
	Wn.			58.2
	Ad.			58.4
5950	St.	55	16	13.0
	R. C_2			11.2
	Yarn.			12.7
	Ad.			12.5
5951	Pulc.	55	15	31.5
	St.			31.2
	R. C_2			30.4
	Yarn.			31.2
	Ad.			31.1
5962	T.	30	51	48.5
	H.			50.1
	Arm.			49.7
	Yarn.			47.6
	Paris			48.0
	Main			49.8
	Wn. 71–72			48.9
	Ay. 73			48.5
	Ad.			48.9
5975	Pulc.	48	39	33.7
	Arm.			33.4
	Ay. 64			32.9$_2$
	Yarn.			33.2$_2$
	Ad.			33.3

No.	Authority.	Declination.		
		°	′	″
5986	T.	31	16	10.5
	Rü.			12.1
	H.			11.6
	Arm.			10.2$_1$
	Ay. 64			11.4
	Main			9.9
	Main 71			11.7
	Ay. 73			11.7
	Ad.			11.2
5990	St.	46	4	25.2
	R. C_2			26.2
	Yarn.			24.9
	Ay. 73			25.5
	Ad.			25.4
5997	Rü.	43	31	62.5$_1$
	R. C.			58.6
	Ja.			55.8
	Ad.			58.4
6013	R.	44	8	23.7
	R. C.			23.3
	Ja.			24.0
	Ad.			23.7
Gr. 2464	R. C.	38	55	54.6
	Pulc.			54.2
	H.			56.1$_1$
	Ad.			54.7
6036	H.	47	39	22.8
	R. C.			21.8
	Ja.			22.3
	Ad.			22.3
6052	Pulc.	50	48	41.6
	Arm.			40.3
	R. C_2			41.4
	Yarn.			41.7$_2$
	Ad.			41.3
6056	R. C.	48	25	43.6
	Arm.			43.6
	Ay. 64			43.3
	Wn.			43.4
	Ad.			43.5
Gr. 2473	T.	40	6	16.9
	R.			16.9
	R. C.			16.8
	Pulc.			17.5
	Arm.			18.6
	Ad.			17.3
6062	H.	40	0	37.6
	Arm.			37.7$_2$
	Yarn.			36.9
	Ay. 72			37.8
	Ad.			37.5
Gr. 2481	R. C.	46	40	35.5
	Pulc.			36.5
	H.			36.6
	Ad.			36.2
6068	Pulc.	40	1	57.6
	Arm.			75.4
	Ay. 64			56.9
	Paris			58.6
	Ad.			57.6

Gr. 2481. P. M. — 0″.16 from Gr. confirmed by Lalande.
5997. Very ill-determined.

No.	Authority.	Declination.	No.	Authority.	Declination.
		° ′ ″			° ′ ″
6079	St.	56 53 34.5	6162	R. C.	43 26 51.2
	R. $C._2$	33.8		Arm.	52.4
	Main 71	33.4		Ja.	50.8
	Wn. 72	34.2		Ad.	51.5
	Ad.	34.1	Rü. 6308	Pulc.	33 25 3.6
6082	St.	37 16 6.0		Rü.	5.1
	Main	5.6		H.	4.6
	Ad.	5.8		Ad.	4.4
6087	Arm.	30 12 4.4	6178	Arm.	31 22 32.1
	Ay. 60	3.1		Ay. 60	31.6
	Ay. 68	3.5_1		Ay. 64	31.8
	Yarn.	2.9		Yarn.	31.4
	Main 72	3.7		Paris	32.3
	Ad.	3.5		Ay. 71–73	31.8
				Ad.	31.8
6095	R. C.	43 25 45.9			
	Ja.	47.0	6184	R. C.	56 14 19.8
	Ad.	46.4		Ja.	19.3
				Ad.	19.6
Gr. 2494	R. C.	45 29 4.3			
	Pulc.	3.7	6185	H.	54 14 59.7
	H.	4.8		R. C.	58.2
	Ad.	4.3		Arm.	58.4
				Ay. 45	58.9
XVII,347	T.	33 13 9.5		Ja.	[59.6]
	H.	11.7		R. $C._2$	58.2
	Pulc.	10.7		Wn.	59.2
	Ad.	10.6		Ad.	59.0
6109	T.	45 30 28.5	6193	Rü.	38 44 21.8
	H.	29.1		R C.	22.9
	R. C.	30.0		Ja.	23.1
	Wn.	28.8		Wn.	23.0
	Ad.	29.1		Yarn.	23.9_1
				Ay. 70	22.7_2
R.C.3820	R. C.	48 28 0.9		Ad.	22.8
	Ay. 50	1.1_1			
	Ad.	1.0	Gr. 2536	R. C.	49 6 51.8
				Rü.	50.0
6129	Rü.	48 27 33.7		Ay. 60	52.0
	Ay. 45	33.3		Ad.	51.3
	H.	32.9			
	R. C.	33.4	6203	St.	42 7 3.7
	Ou.	33.7		Ay. 67–72	3.8
	Ja.	32.9		Pulc.	3.7
	Ay. 60	33.1		Ad.	3.7
	Main	34.2			
	Ad.	33.3	6216	Rü.	56 32 44.6
				Ay. 45	44.5
Rü. 6227	R.	46 25 59.6_2		R. C.	45.5
	A. Ö.	26 1.1_1		Ay. 50	45.5
	H. C.	3.2		Ja.	45.2
	Ad.	1.6		Ad.	45.1
6147	Arm.	30 32 43.8	6218	Ay. 45	40 53 18.0
	Q.	43.9		H.	18.8
	Y.	42.2		R. C.	19.4
	Ay. 64	42.6		Arm.	17.3
	Paris	42.8		Ja.	19.6
	Main	44.0		Ay. 60	18.1
	Main 71	42.2		Ad.	18.5
	Ad.	43.1			
			6235	Arm.	36 0 32.8
Rü. 62	Rü.	46 15 31.7_1		Yarn.	32.9
	A. Ö.	33.2_1		Ay. 60	32.7
	H. C.	31.2		Ay. 72	34.3
	Ad.	31.8		Ad.	33.2

Gr. 2494. P. M. + 0″.06 from Gr.

R. C. 3820. Main gives 1″.4 (6 obs.)

6162. Later observations at Washington disagree about — 4″ from this declination. Under any circumstances Armagh and Washington cannot be reconciled; the formula 43° 26′ 48″.6 — 0″.05 (t — 1875) is approximately correct if Armagh be rejected.

No.	Authority.	Declination.		
		°	′	″
6246	Ay. 45	51	17	38.2
	R. C.			39.1
	Ja.			38.3
	Ou.			38.3
	Ad.			38.5
6252	R.	49	39	53.3
	R. C.			55.5
	Ja.			54.9
	Seeberg			55.0
	Ad.			54.7
6255	Ay. 45	49	3	34.0
	H.			33.3
	R. C.			34.1
	Arm.			33.3
	Ja.			33.8
	Ou.			34.8
	Ay. 60			33.8
	LeV.			33.4
	Seeberg			33.4
	Ad.			33.8
6258	Rü.	51	14	26.9
	Ay. 45			28.0
	R. C.			30.0
	Ja.			30.5
	Yarn.			27.4
	Ad.			28.6
6268	Arm.	39	26	25.5
	Pulc.			24.8
	Ay. 64			24.0
	Ay. 73			24.5
	Ad.			24.7
Gr. 2563	R. C.	42	24	1.8
	Rü.			3.5_1
	Ay. 60			1.2_1
	Ay. 64			0.7
	Ad.			1.6
6289	St.	58	43	43.9
	LeV.			43.0
	Pulc.			43.8
	Wn. 72			43.5
	Ad.			43.6
6311	R. C.	59	37	41.3
	Arm.			38.4
	Ja.			39.1
	Wn. 72			39.3
	Ad.			39.5
6318	Ay. 45	59	27	57.6
	R. C.			57.6
	Ja.			59.7
	Oom.			58.2
	Ad.			58.3
Arg. LXIII	H.	30	27	41.2
	Pulc.			41.2
	Bonn.			42.6
	Ad.			41.7
Gr. 2597	R. C.	45	40	53.8
	Arm.			54.9
	Ad.			54.4

No.	Authority.	Declination.		
		°	′	″
6335	R. C.	52	1	21.0
	Arm.			19.6
	Ja.			21.0
	Ou.			20.6
	LeV.			20.6
	Ad.			20.6
Gr. 2603	T.	46	7	19.2
	R. C.			17.7
	Arm.			18.6_1
	Ad.			18.5
6348	Ay. 40	56	57	1.1
	Ay. 45			0.6
	Arm.			1.0
	R. C.			2.7
	Pulc.			2.2
	Ad.			1.5
6350	H.	52	15	19.2
	R. C.			18.2
	Arm.			17.4
	Ja.			18.3
	Ay. 60			18.1
	Main 70			17.4_2
	Ad.			18.1
6349	Ay.	38	47	38.4
	Pulc.			39.1
	R. C.			37.9
	Arm.			38.4
	$R. C._2$			38.2
	Ad.			38.4
Gr. 2615	R. C.	42	57	11.0
	Arm.			9.5
	Ad.			10.2
6357	T.	39	33	33.1
	H.			33.0
	R. C.			34.2
	Wn.			32.0
	Ad.			33.1
6364	R. C.	40	49	18.3
	Arm.			17.9
	Ja.			18.4
	Ad.			18.2
6365	T.	38	15	8.7
	R. C.			8.6
	Ay. 64			7.8
	Yarn.			6.6
	Wn. 72			7.3
	Ad.			7.8
Gr. 2632	T.	52	13	50.2
	P. M.			52.5
	Rü.			52.6_1
	Arm.			50.8
	R. C.			52.8
	Ad.			51.7
6368	Arm.	55	7	49.8
	Pulc.			49.6
	Ja.			48.3
	$R. C._2$			48.4
	Wn.			48.6
	Ay. 72			49.1_1
	Ad.			49.0

No.	Authority.	Declination.	No.	Authority.	Declination.
		° ′ ″			° ′ ″
6372	Pi.	52 4 45.2	6419	Rü.	52 51 5.0
	Gr.	44.3		R. C.	5.1
	Bessel	41.3		Arm.	5.7
	T.	44.7		Ja.	5.6
	Rü.	43.2		Ay. 60	4.7
	H.	44.9		Eng. 73	4.9
	R. C.	43.5		Ad.	5.1
	Arm.	43.4			
	Leid.	44.3			
	Eng.	44.4	6421	R. C.	49 17 39 4
	Ay. 72	44.5		Ja.	37.7
	Ad.	44.4		Ay. 60–64	39.0
				Seeberg	38.7
Gr. 2644	R. C.	39 10 32.3		Ad.	38.7
	Rü.	32.8			
	Arm.	33.2$_1$	6428	Ay. 45	48 37 32.0
	Ay. 73	33.4		H.	32.2
	Ad.	32.9		R. C.	32.4
				Arm.	33.0
Gr. 2646	R. C.	44 48 7.8		Ja.	33.1
	Rü.	10.9		Ou.	32.5
	Arm.	9.7		Ay. 60	32.5
	Ay. 40	6.7		Ad.	32.5
	Ay. 45	7.0			
	Ay. 50	7.3	Gr. 26[illegible]7	R. C.	43 48 33.6
	Ad.	8.2		Arm.	33.3
				Ad.	33.5
6390	St.	39 32 25.3			
	Ay. 69	25.5	Gr. 2693	H.	41 13 56.9
	Leid.	25.0		Pulc.	56.3
	Eng.	25.4		Arm.	55.4
	Ad.	25.3		R. C.	56.2
				Ad.	56.2
6395	Arm.	55 24 46.9			
	Pulc.	48.2			
	Wn.	48.4	6452	H.	52 48 50.4
	Paris	48.1		R. C.	50.5
	Ad.	47.9		Arm.	49.7
				Ja.	[50.1]
6391	St.	39 28 58.7		Yarn.	49.9
	R. C.$_2$	58.5$_1$		Ay. 60	51.5
	Yarn.	57.9		Ay. 64	51.7
	Ad.	58.3		Ad.	50.7
6392	Arm.	37 28 31.2			
	Pulc.	31.9	6463	St.	59 14 9.7
	Ay. 60	31.3		Oom.	9.0
	R. C.$_2$	31.7$_1$		Ay. 64	9.9$_3$
	Ay. 64	31.6		Leid.	9.3
	Ad.	31.5		Nyrén	9.1
				Main	8.9
6394	Pulc.	37 27 54.0		Ad.	9.3
	Arm.	52.8			
	Ay. 60	53.9	6456	Arm.	36 48 60.4
	R. C.$_2$	51.9$_1$		Ay. 60	59.6
	Ay. 64	54.1		Ay. 64	59.8
	Ad.	53.5		Main	59.7
				Ad.	59.9
Gr. 2659	R. C.	53 44 41.2			
	Arm.	40.7	Gr. 2701	R. C.	42 44 50.6
	Ad.	40.9		Ay. 60	49.8
				Ay. 64	50.4
6404	H.	41 18 30.5		Ad.	50.3
	R. C.	31.3			
	Ja.	31.0			
	Ad.	30.9	6470	R.	50 33 13.2
				H.	13.6$_1$
Gr. 2669	Rü.	46 10 44.2		R. C.	13.9
	A. Ö.	44.2$_1$		Ja.	12.9
	R. C.	44.1		Ou.	13.3
	Ad.	44.2		Ad.	13.4

6404. Confirmed by late Washington observations.
Gr. 2701. P. M. — 0″.04 Gr.

No.	Authority.	Declination.	No.	Authority.	Declination.
		° ′ ″			° ′ ″
6466	Arm.	36 44 26.9	6500	T.	58 3 11.2
	Yarn.	27.0		Rü.	12.5
	Ay. 60	27.2		R. C.	13.6
	Main -	29.0		Arm.	12.8
	Ad.	27.6		Wn. -	14.2
				Åbo and Dorpat	12.7
6468	Arm.	33 48 36.6		Pulc. -	14.2
	Ja.	36.2		Ad.	13.2
	Sm. -	35.9			
	Ay. 72	37.2	6516	R.	47 51 30.8_1
	Main	36.5		R. C.	29.6
	Ad.	36.5		Ja.	29.6
6473	H.	41 26 37.6		Ad.	29.8
	R. C.	37.7			
	Ja.	37.7	6520	Pi.	46 45 30.1
	Ad.	37.7		Gr. -	30.2
6476	T.	48 42 13.7		T. -	29.4
	Rü.	14.3		H.	30.4
	H.	15.4		R. C.	30.2
	R. C.	14.2		Arm.	30.4
	Yarn. -	12.9		Q.	30.0_1
	Pulc.	14.2		Ad.	30.2
	Ad.	14.1			
6475	St.	43 46 56.3	6522	Arm.	55 28 46.8
	Pulc.	56.3		Pulc.	47.8
	Ay. 71	56.2		R. C. -	46.3
	Main	56.6		Pulc. 67	47.6
	Ad.	56.4		Ad.	47.2
6477	R. C.	57 19 42.2	6530	Ay. 45	52 4 49.6
	Ja.	43.1		R. C.	50.6
	Ad.	42.6		Ja.	48.4
				Ou.	49.6
6480	Arm.	32 44 31.8		Ad.	49.6
	Ja.	31.3			
	R. $C._2$	30.8	6534	Ja.	31 33 32.9
	Ay. 64	32.0		Wn. -	32.8
	Sm.	30.6		Sm.	33.3_1
	Ad. -	31.3		Main	33.4
				Ad.	33.1
6491	St.	32 31 10.0			
	R. $C._2$	8.7	6551	R. C.	53 12 18.1
	Yarn.	10.5		Pulc.	20.1
	Ay. 71	9.2		Arm.	19.3
	Ay. 73	9.4		Wn. -	19.6
	Main	9.7		Ad.	19.3
	Ad.	9.7			
			6553	Arm.	32 18 22.9
6496	R. C.	57 38 59.2		R. $C._2$	22.3
	Pulc.	59.0		Ay. 64	21.4
	Arm.	57.6		Wn. -	20.9
	Ay. 60	59.2		Ad.	21.9
	Ad.	58.8			
			6556	St.	35 54 18.6
6493	P. M.	40 30 32.3		Main	20.1
	R. C.	30.4		Pulc.	18.7
	Ja.	32.2		Wn. -	19.6
	Ad.	31.6		Ay.	18.9
				Ad.	19.0
6495	R.	39 2 44.5			
	R. C.	43.6	Gr. 2770	T.	38 43 52.4
	Ja.	43.7		Rü.	50.3_1
	Yarn.	43.5		Arm.	52.8
	Ad.	43.8		R. C.	52.4
				Ad.	52.2
6497	Pulc.	31 58 17.7			
	Arm.	16.5	Gr. 2774	T.	38 57 23.3
	Ay. 64	18.9		R. C.	24.4
	Main -	18.9		Arm. -	25.7
	Ad.	18.0		Ad. - - -	24.5

Gr. 2770. Later observations by Main give 53″.0.

No.	Authority.	Declination.		
		°	′	″
6566	Rü.	50	9	45.2
	Ay. 45			47.0
	R. C.			46.2
	Ja.			47.6
	Wn.			45.9
	Ad.			46.4
6567	Ja.	31	25	53.7
	R. C.$_2$			54.8
	Sm.			54.1
	Ay. 73			55.2$_1$
	Ad.			54.3
6571	Arm.	31	4	34.2
	Ja.			33.4
	Ay. 64			33.8
	Main			35.3
	Wn.			33.9
	Main 72			33.7
	Ay. 72			34.1
	Ad.			34.1
R. 7219	Rü.	58	4	2.5
	A. Z.			2.8
	H. C.			3.8
	Ad.			3.1
6579	Arg.	49	37	16.3
	Wn.			15.8
	Main			15.4$_2$
	Ad.			16.0
6583	Arm.	56	38	48.2
	Pulc.			48 8
	Ay. 60			48.6
	Leid.			47.7
	Ay. 69			47.5
	Ad.			48.1
6581	R. C.	38	55	54.9
	Arm.			54.3
	Ay. 60			54.9
	Main			54.4
	Ay. 70–3			54.8
	Ad.			54.7
6593	R.	40	8	28.9$_1$
	R. C.			32.5
	Ja.			30.9
	Ad.			31.1
6601	Pulc.	57	29	25.0
	R. C.			23.2$_{11}$
	Ay. 45			23.4
	Arm.			24.1$_2$
	Ad.			23.8
6599	St.	37	54	42.9
	Pulc.			43.2
	Yarn.			43.3
	Ay. 72			44.1
	Ad.			43.3
6603	R. C.	49	51	3.8
	Ja.			2.8
	Seeb.			3.8
	Ad.			3.6

No.	Authority.	Declination.		
		°	′	″
6623	St.	53	8	18.3
	Ay. 64			18.5
	Ay. 69			17.8
	Leid.			18.5
	Eog.			18.5
	Ay. 72			18.9
	Ad.			18.5
6624	R. C.	40	7	50.8
	Ja.			52.4
	Ay. 64			51.3
	Ad.			51.5
6626	Rü.	49	20	17.4
	R. C.			19.3
	Ja.			17.2
	Ay. 64			18.3
	Ay. 68			18.2
	Ad.			18.1
6635	Ay. 45	54	8	39.3
	R. C.			39.1
	Ja.			39.9
	Ad.			39.4
6640	Pulc.	57	24	35.1
	H.			35.3
	R. C.			34.2
	Ja.			35.9
	Ad.			35.1
Gr. 2829	Rü.	52	8	11.7
	R. C.			13.1
	Ad.			12.4
Gr. 2833	Rü.	57	31	34.3
	H.			35.1
	R. C.			35.4
	Pulc.			34.9$_2$
	Ad.			34.9
6651	T.	36	12	[22.4]
	Arm.			21.7
	Pulc.			21.3
	H. C.			21.8
	Ay. 64			22.0
	Main			22.0
	Ad.			21.8
6656	Rü.	43	8	43.6$_1$
	H.			43.9
	R. C.			44.5
	Ja.			44.8
	Ay. 60			44.5
	Ad.			44.4
6659	T.	50	1	39.5
	Ay. 45			39.8
	R. C.			39.7
	Arm.			39.4
	Ou.			39.5
	Ad.			39.6
6667	Arm.	36	4	6.1
	Ay. 64			7.4
	Main			6.2
	Wn.			5.0
	Main 71			6.2
	Yarn			4.2
	Ad.			5.7

6635. Later observations (Washington) indicate a P. M. of about $-0''.05$ and correction to declination of about $-2''$.

No.	Authority.	Declination.		
		°	′	
Gr. 2844	R. C.	44	41	4.4
	Pulc.			5.0
	H.			5.1
	Ad.			4.8
Gr. 2845	H.	44	45	47.7
	R. C.			46.1
	Ad.			46.9
6681	T.	57	46	34.0
	R.			33.7
	R. C.			34.1
	Arm.			33.0
	Ad.			33.7
6687	Arm.	52	3	59.0
	Pulc.			59.7
	Ay. 60			58.4
	Ay. 69			59.1
	Leid.			59.4
	Eng.			59.1
	Ad.			59.2
6697	St.	51	27	51.0
	$R. C._2$			50.6
	Ay. 69			50.4
	Leid.			51.1
	Eog.			50.8
	Ad.			50.9
6698	Arm.	34	11	18.1
	Ay. 64			17.4
	Main			19.6
	Wn.			17.3
	Ay. 71			17.7
	Ay. 73			17.0
	Ad.			17.9
XIX, 193	T.	55	27	58.0
	R. C.			59.4
	Arm.			59.1
	Ad.			58.8
Gr. 2872	Ay. 40	54	59	35.9
	R. C.			35.7
	H. C.			34.7
	Ad.			35.4
6712	Arg.	58	19	58.8
	Pulc.			58.5
	Wn.			57.6
	Ad.			58.4
6711	Rü.	38	29	26.0
	R. C.			26.2
	Ja.			25.9
	Ad.			26.0
6717	Rü.	48	59	28.0
	R. C.			27.8
	Ja.			27.9
	Ay. 60			27.2
	Ad.			27.7
6718	Pulc.	42	8	23.5
	R. C.			24.2
	H.			24.7
	Rü.			23.6
	Ja.			23.9
	Ad.			24.0

No.	Authority.	Declination.		
		°	′	″
6720	Rü.	43	40	18.1
	R. C.			18.7
	Ja.			18.2
	Ad.			18.4
6723	T.	50	58	8.7
	H.			9.6
	R. C.			9.7
	Arm.			7.5
	Ou.			9.3
	$R. C._2$			8.5
	Leid.			8.6
	Eng.			8.5
	Ad.			8.8
6721	Gr. R. C.	47	53	35.1
	R. C.			34.8
	Ja.			34.5
	Yarn.			35.3
	Wn.			34.8
	Ad.			34.9
R.C.4379	Rü.	59	53	9.0
	Ay. 40			9.8
	R. C.			11.2
	Ad.			10.0
6722	Arm.	36	40	6.5
	Ay. 64			7.2
	Main			5.2
	Ay. 72			5.8
	Ad.			6.2
6728	R.	43	25	37.9
	R. C.			38.0
	Ja.			38.4
	Yarn.			37.7
	Ad.			38.0
6730	Arm.	49	57	31.6
	Q.			33.0_1
	Ay. 60			33.8
	Ay. 64			32.5_2
	Yarn.			33.1_2
	Ad.			32.7
6731	Pulc.	44	25	8.9
	H.			9.7
	R. C.			9.5
	Ja.			10.2
	Ad.			9.6
6734	St.	49	55	55.8
	Leid.			56.9
	Eog.			56.2
	Pulc.			56.9
	Yarn.			57.2
	Main			57.3
	Ad.			56.6
6741	Pi.	48	59	46.8
	Gr.			43.5
	T.			[36.8]
	Rü.			[41.8]
	R. C.			43.7
	Arm.			45.0
	Ay. 60			44.7
	Ad.			44.5

Gr. 2844. A P. M. of about $-0''.1$ probable; has not been used.
Gr. 2872. P. M. $+0''.11$ from Gr. Omitted in catalogue.
6711. Later observations (Yarnall) indicate P. M. $+0''.01$, declination $27''.2$.

No.	Authority.	Declination.		
		°	′	″
6745	Pulc.	42	31	49.1
	R. C.			50.3
	Arm.			50.5
	Ay. 60			49.5
	Yarn.			48.2
	Ad.			49.6
6748	H.	54	40	50.4
	R. C.			49.2
	Ja.			50.7
	Pulc.			50.6
	Ay. 60			50.8
	Wn. 67			52.4
	Wn. 73			52.6
	Ad.			51.2
6754	Gr.	45	13	46.8
	H.			47 9
	R. C.			46.0
	Ja.			45.9
	LeV.			46.7
	Wn.			46.4
	Ad.			46.8
Gr. 2912	H.	39	57	33.4
	R. C.			33.2
	Pulc.			32.9
	Ad.			33.2
6763	Pulc.	50	14	8.9
	Ay. 60			9.3
	R. C_2			7.7
	Ad.			8.6
6764	R. C.	50	13	41.8
	Ay. 60			42.1
	R. C_2			40.3
	Bonn.			42.0
	Ad.			41.6
6765	Rü.	38	22	26.0
	R. C.			30.4
	Ja.			29.2
	Ad.			28.5
6769	R. C.	41	28	26.6
	Ja.			26.6
	Yarn.			27.0
	Ad.			26.7
6771	St.	37	3	12.3
	Pulc.			12.1
	Ad.			12.2
6780	Gr.	57	43	7.9
	R. C.			9.4
	Ja.			8.6
	Ay. 60			8.0
	Ad.			8.5
6779	St.	44	49	36.0
	Ay. 64			36.0
	Yarn.			36.1
	Ay. 69			35.8
	Leid.			35.3
	Eng.			36.2
	Main 70			35.1
	Ay. 72			35.8
	Ad.			35.7

No.	Authority.	Declination.		
		°	′	″
6777	T.	34	42	33.3
	H.			33.3
	Arm.			34.6
	Yarn.			32.2
	R. C_2			33.2
	Main.			35.3
	Wn.			32.8
	Main			32.9_1
	Ad.			33.5
6784	Arm.	33	26	[19.2]
	Ay. 60			17.0
	R. C_2			15.5
	Ay. 64			16.6
	Main			15.3
	Ay. 72			16.3
	Ad.			16.2
6799	H.	47	35	58.6
	R. C.			57.6
	Arm.			58.3
	Ja.			58.7
	Ad.			58.3
6800	T.	33	7	32.5
	Arm.			32.8
	R. C_2			32.1
	Ad.			32.5
Gr. 2946	Ay. 45	56	36	6.5_2
	R. C.			8.1
	H. C.			7.0
	Ad.			7.3
6806	R. C.	38	23	47.2
	Pulc.			47.1
	Arm.			45.9
	R. C_2			47.3
	Ay. 64			46.9
	Ad.			46.9
χ Cygni	H.	32	35	58.6
	Pulc.			56.4_1
	Bonn.			57.5
	Ad.			57.7
6818	R. C.	59	6	20.4
	Ja.			30.0
	Oom.			18.7
	Wn.			18.5
	Ad.			19.2
6813	R. C.	38	24	7.3
	Arm.			5.3
	Ja.			6.3
	R. C_2			7.3
	Ay.			5.8
	Ad.			6.4
6817	Gr. R. C.	40	16	57.5
	Ay. 45			57.9
	H.			57.9
	R. C.			56.9
	Ja.			58.0
	Yarn.			56.8
	Ay. 60			57.1
	Ad.			57.4

6748. P. M. + 0″.05 from Groombridge. There is some suspicion of error in Gr.; without it the P. M. would be + 0″.14 and the declination 52″.8.
Gr. 2946. P. M. — 0″.10 from Gr.
6818. Ja. probably 10″ in error.

No.	Authority.	Declination.		
		°	′	″
6824	Pulc.	52	40	17.3
	Arm.			16.6
	Ay. 60			17.4
	Wn. -			16.4
	Ad.			16.9
Gr. 2957	R. C.	47	3	23.7
	Arm.			23.0
	Ad.			23.4
6830	H. -	47	36	36.5
	R. C.			35.1
	Ja.			37.0
	LeV.			35.7
	Ad.			36.1
6847	Pulc.	57	11	46.8
	R. C.			47.1
	Arm.			46.6
	Ay. 64			46.5
	Ad.			46.8
Gr. 2978	R. C.	57	50	23.6
	Arm.			21.3
	Ad.			22.5
R.C.4507	R. C.	39	50	31.1
	H. C.			30.1
	Ad.			30.6
6852	H.	59	22	42.2
	R. C.			42.1
	Arm.			42.1
	Ja.			42.8
	Oom.			42.6
	Smyth -			41.9
	Ad.			42.3
Gr. 2977	R. C.	47	12	37.2
	Arm.			37.7_1
	Ad. -			37.4
6849	Pulc.	38	9	20.2
	Yarn.			20.4
	R. C. - -			20.2
	Arm. -			19.8
	Ay. 64			20.0
	Ad.			20.1
6851	Arm.	34	45	8.5
	Ay. 60			8.1
	Yarn. -			8.2
	Ay. 71-2			9.0_2
	Ad.			8.5
6856	Pulc.	52	6	27.6
	$R. C._2$			27.9
	Ay. 64			28.3
	Ay. 69			27.8
	Leiden -			28.0
	Eng.			27.3
	Ad.			27.8
R.C.4521	R. C.	59	16	11.8
	Oom.			11.5
	Ad.			11.6
6863	R. C.	57	55	14.7
	Arm.			13.7_2
	Ja.			13.5
	Ad. -			14.0

No.	Authority.	Declination.		
		°	′	″
6857	H.	40	1	58.9
	R. C.			58.4
	Arm.			58.0
	Ja. -			57.4
	Ay. 60			59.3
	Yarn.			57.0_2
	Ad.			58.3
6860	T. -	38	7	21.3
	R. C.			23.3
	Q. 63			21.2_2
	Ad. -			22.0
6865	Ay. 45 -	50	34	1.9
	H. -			3.1
	R. C.			1.9
	Arm.			1.2
	Ja.			2.0
	Ou.			2.2
	Ad.			2.0
6867	T. -	58	30	45.1
	Ay. 45			46.7
	H.			45.6
	R. C.			46.3
	Arm.			46.8
	Pulc.			46.1
	Ad.			46.2
XIX, 370	T.	56	21	6.8
	H.			5.7
	Arm.			6.2
	Ad.			6.2
6875	Arm.	36	42	6.0
	$R. C._2$			5.4
	Ay. 64			4.0
	Wn. -			3.7
	Ay. 68			4.0
	Ad.			4.6
6876	H.	45	25	56.1
	R. C. -			55.8
	Arm.			55.3
	Ja.			55 5
	Ad.			55.7
6881	T.	51	42	50.7
	H.			50.7
	R. C.			49.7
	Arm. -			49.3
	Ou.			50.2
	Ad.			50.1
XIX, 391	T.	57	28	3.5
Gr. 3011	R. C.			3.2
	Arm.			3.1
	Ad.			3.3
Gr. 3013	R. C.	40	30	42.6
	Arm.			40.2_2
	Ad.			41.8
Gr. 3014	R. C.	43	46	21.0
	Arm.			22.5_1
	Ad.			21.5
6895	Arm.	49	45	27.4
	Ay. 60			26.9
	Leid.			27.3
	Eng.			27.3
	Seeb. -			27.2
	Main 72			26.4
	Ad.			27.1

6863. Later observations (Washington) indicate an increase of southerly P. M. to 0″.10 and change of decl. by —1″.
6875. Later observations are, Yarnall 1874, 4″.4 (1 obs.); Main 1875, 4″.3.

No.	Authority.	Declination.	No.	Authority.	Declination.
		° ′ ″			° ′ ″
6915	Arm.	35 37 46.2	6969	Ay. 64	36 22 20.4
	Pulc.	45.1		Yarn.	21.0
	Q.	45.5		Main	19.9$_2$
	R. C$_2$	44.6		Ad.	20.5
	Ay. 64	43.8			
	Ad.	45.1	6976	St.	56 11 8.7
				Pulc.	8.9
6918	Rü.	51 28 [53.4]		Ad.	8.7
	H.	55.0			
	R. C.	54.6	6983	Ay. 60	47 19 51.2
	Ja.	54.7		Ay. 69	51.8
	Pulc.	53.8		Leid.	52.0
	Ou.	53.2		Lpz.	52.2
	Ad.	54.1		Ad.	51.7
6924	Rü.	55 58 45.1	Gr. 3110	H.	45 11 52.1
	R. C.	46.5		R. C.	52.4
	Ay. 45	46.8		Ad.	52.2
	Ad.	46.1			
6928	H.	52 47 49.8	6985	R. C.	49 50 54.6
	R. C.	49.0		Ja.	55.6
	Ja.	48.9		Seeb.	55.2
	Wn.	48.4		Ad.	55.1
	Ay.	47.6			
	Leid.	48.6	6986	R. C.	39 58 45.9
	Eng.	48.6		Arm.	45.8
	Ad.	48.6		Ja.	44.8
				R. C$_2$	44.1
6937	Arm.	36 28 22.9		Ay. 64	44.7
	Yarn.	22.4		Ad.	45.1
	Ay. 60	22.0			
	R. C$_2$	20.9	6990	Arm.	37 38 43.4
	Ay. 72	21.1		R. C$_2$	41.1
	Ad.	21.9		Ay. 64	42.1
				Main	43.3
6959	H.	51 5 18.8		Main 71	42.6
	R. C.	18.1		Ad.	42.5
	Arm.	18.3			
	Ja.	18.3	6996	Pulc.	40 20 35.6
	Pulc.	18.3		Arm.	34.3
	Ay. 60	16.7		Ja.	36.4
	Ad.	18.1		Ay. 64	35.2
				Ad.	35.4
6962	Arm.	46 26 18.5			
	Ay. 64	17.6	6997	Arm.	36 36 33.9
	Ay. 68	18.8$_1$		Ay. 64	34.6
	Main 71	16.9$_2$		Main	34.5
	Ad.	17.9		Main 70	33.9
				Ad.	34.2
6963	R. C.	43 0 2.6			
	Ja.	2.6	6998	Arm.	34 35 35.6
	Ay. 60	1.8		Ay. 64	34.4
	Ad.	2.3		Main	35.7
				Ay. 73	35.2
6965	St.	46 21 46.6		Ad.	35.2
	Ay. 69	46.5			
	Leid.	47.0	7001	R. C.	38 36 48.8
	Eng.	47.1		Ja.	50.4
	Main	46.1		Yarn.	49.6
	Ad.	46.6		Ad.	49.6
XX, 63	T.	46 20 0.2			
R.C.4661	R. C.	0.0	7007	Pulc.	49 6 22.8
	Ay. 45	0.9		R. C.	22.8
	Ay. 60–64	1.2$_2$		Ay. 64	23.6
	Ad.	0.6		Ad.	23.0
6967	Arm.	36 25 28.7	7006	Arm.	36 44 24.1
	Q.	30.0		R. C$_2$	23.6
	R. C$_2$	27.8		Yarn.	23.6
	Ay. 64	28.1		Ay. 64	23.9
	Yarn.	28.3		Smyth	23.5
	Main 70	27.4$_1$		Ad.	23.7
	Ad.	28.5			

6915. Yarnall 1874 gives 45″.2 (2 obs.).
6928. The catalogue place is 0″.2 too far north.
7007. P. M. — 0″.07 from Bessel 1815.

No.	Authority.	Declination.		
		°	′	″
Gr. 3142	H.	55	0	25.6
	R. C.			25.7
	Pulc.			25.5_2
	Ay. 45			26.9_1
	Ad.			25.5
7008	R. C.	39	0	35.2
	Arm.			37.6
	Ja.			36.6
	Ay. 60–64			35.2_2
	Ay. 69			35.8
	Ad.			36.1
7022	St.	39	51	27.5
	R. $C._2$			27.9
	Yarn.			26.2
	Leid.			27.0
	Eng.			27.0
	Ay. 72			27.1
	Main			26.7
	Ad.			27.2
7027	Gr.	40	37	38.6
	H.			39.8
	R. C.			38.8
	Arm.			38.7
	Ja.			39.5
	Ay. 60			37.5
	Pulc.			38.6
	Ad.			38.8
7029	Pulc.	31	47	14.4
	Arm.			15.6
	Yarn.			14.5
	Ay. 60			15.5
	Ad.			15.0
7035	R. C.	54	16	13.9
	Ja.			13.9
	Ad.			13.9
7041	R. C.	42	11	49.3
	Ay. 50			47.5
	Ja.			47.6
	LeV.			48.3
	Ad.			48.2
7048	R. C.	39	59	34.9
	Ja.			34.2
	Ad.			34.6
7055	R. C.	54	16	31.7
	Ja.			32.6
	Ad.			32.2
7060	R. C.	59	11	31.8
	Ja.			31.8
	Oom.			30.4
	Ad.			31.3
7061	Arm.	38	1	51.9
	Ay. 64			50.1
	Main			51.2
	Ay. 73			50.6
	Ad.			51.0
7062	Arm.	48	58	9.6
	Ay. 60			9.7
	Ay. 64			10.2
	Yarn.			9.0_2
	Ay. 71			9.7_2
	Ad.			9.7
7064	Pulc.	56	13	38.3
	H.			38.0
	R. C.			38.4
	Ja.			37.7
	Wn.			38.3
	Ad.			38.1
7073	Arm.	36	2	19.4
	Ay. 64			18.7
	Main			19.7
	Wn.			18.1
	Yarn.			18.4
	Main 71			19.1
	Ad.			18.9
7076	Pulc.	48	30	14.1
	R. C.			14.2
	Arm.			13.3
	Ay. 64			13.5_2
	Ad.			13.8
7083	Arg. 209	45	30	17.7
	Wn.			16.0
	R. $C._2$			18.4
	Ad.			17.5
7084	Arm.	36	30	56.4
	Main			57.2
	Wn.			56.2
	Ay. 73			56.2
	Ad.			56.3
7085	Arm.	48	31	57.2
	Yarn.			55.9
	Ay. 69			55.8
	Leid.			55.5
	Ad.			55.9
7086	H.	55	38	57.4
	R. C.			57.4
	Arm.			57.3
	Ja.			57.0
	Sm.			57.0
	Pulc.			58.3
	Ad.			57.4
7091	Arm.	48	47	57.2
	Yarn.			56.7
	Ay. 60			56.1
	Eng.			56.2
	Ad.			56.4
Gr. 3215	R. C.	41	27	26.4
	H. C.			25.1
	Ad.			25.7
7100	R. C.	42	45	59.3
	Ja.			58.4
	Ad.			58.9

7062. Main 1875 gives 9″.8 (3 obs.).
7064. P. M. + 0″.02 from Gr.
7076. P. M. — 0″.04 from Pi.
7083. P. M. from Argelander.
7086. The Pulcova observations are taken from Bäcklund's paper on the latitude of Lund, with S. C. + 0″.4
Gr. 3215. The P. M. + 0″.43, from Groombridge, seems to be certain.

No.	Authority.	Declination.	No.	Authority.	Declination.
		° ′ ″			° ′ ″
7101	R. C.	41 2 49.8	7153	R. C.	52 32 13.5
	Ja. - -	49.9		Ja.	14.9
	Wn. 73 - -	48.4		Ad.	14.2
	Ad.	49.1			
7103	Arm.	34 49 25.9	7158	Pulc.	40 8 17.9
	Ay. 64	24.9		H.	19.7
	Main	26.4		R. C.	18.3
	Ay. 72	25.6		Ja.	19.5
	Ay. 73	25.4		Yarn.	17.8
	Ad.	25.6		Ad.	18.6
7105	T.	56 21 22.2	7161	Ja.	45 13 33.6
	H.	21.5		Arm.	32.9
	R. C.	21.5		R. C.	33.1
	Arm.	21.2		Ay. 64	32.7
	Pulc.	21.2		Sm.	32.7
	Ad.	21.5		Ad.	33.0
Gr. 3220	R. C.	41 20 51.2	7164	Arm.	31 51 48.6
	H. C.	49.6		Ay. 64	48.8
	Ad.	50.4		Main	49.0
				Ay. 68	49.8
7112	H.	46 15 57.1		Ay. 71	48.8
	R. C.	55.8		Ad. -	49.0
	Ja. -	56.5			
	Yarn.	56.7	7174	R. C.	41 16 12.8
	Ad.	56.5		Pulc.	11.7
7114	R. C.	40 40 5.2		Ja.	12.5
	Ja.	6.3		Ad.	12.2
	Yarn.	6.6_2			
	Ad.	6.0	7182	Arm.	49 53 31.1
				$R. C._2$	28.8
R.C.4871	R. C.	41 17 15.7		Ay. 64	30.7
	H. C.	16.3		Ay. 69 -	30.1
	Bonn.	15.9_1		Leid.	30.6
	Ad.	16.0		Eng.	30.6
				Ad.	30.3
7119	R. C.	41 27 30.5			
	Ja.	30.9	7189	T.	56 56 10.6
	Ad.	30.7		R. C.	10.2
				Arm.	12.4
7120	T.	51 25 25.4		Ad.	11.1
	R. C.	26.0			
	Ou.	24.2	7194	Arm.	30 15 52.2
	Ad.	25.2		$R. C._2$	51.0
				Ay. 64	51.4
7131	Arm.	31 8 12.2		Main	51.9
	Ay. 64	13.2		Ad.	51.6
	Main	13.5			
	Wn. -	13.1	7198	Pulc.	46 50 38.7
	Main 71	12.5		H.	39.3
	Wn. 73 - -	13.1		R. C.	37.4
	Ad.	12.6		Ja. -	39.3
				Wn. 72 -	38.2
7132	Arm.	31 5 15.1		Ad.	38.6
	Ay. 64	14.7			
	Main	14.7	7204	St. -	33 30 11.2
	Yarn. -	14.7_2		Ay. 64	10.5
	Main 71	13.6		Ay. 69	11.4
	Wn. 73 -	13.9		Leid. -	10.4
	Ad.	14.4		Eng.	11.5
Gr. 3243	R. C.	42 24 8.9		Main	10.7
	H. C.	7.7		Ay. 72	11.4
	Ad.	8.3		Ad.	11.0

Gr. 3220. P. M. used, — 0″.10 from Gr.
7119. I have gone back from the P. M. used in L. S. C. (+ 0″.05).
Gr. 3243. P. M. + 0″.20 from L. (3 obs.) and Gr.
7164. Ay. 64 has double weight.
7174. Pulc. (6 obs.) has double weight.

No.	Authority.	Declination.		
		°	′	″
7213	St.	36	1	56.1
	Ay. 69			55.6
	Eng.			56.3
	Leid.			55.6
	Main			56.3
	Pulc.			55.6
	Ad.			56.0
7215	St.	57	7	54.0
	Pulc.			53.6
	Ad.			53.8
7218	R. C.	52	32	26.0
	Ja.			25.9
	Wn.			26.5
	Ad.			26.1
7219	R. C.	45	7	17.7
	Ja.			18.0
	Yarn.			16.9
	Ad.			17.5
7233	Arm.	45	39	2.8
	LeV.			3.7
	Wn.			4.6
	Ay. 72			3.4_1
	Ad.			3.7
7241	Arm.	43	35	20.9
	Q.			20.8
	R. $C._2$			20.3
	Ay. 64			20.7_2
	Wn. 73			20.9_2
	Ad.			20.7
7243	R. C.	50	19	8.5
	Ja.			9.3
	Ou.			8.4
	Wn.			7.9
	Ad.			8.5
Gr. 3311	R. C.	51	55	37.2
	Arm.			36.8
	Ad.			37.0
7253	Arm.	43	54	53.2
	Ja.			53.1
	Yarn.			52.7
	Ay. 60			52.8
	Ay. 64			52.9
	Wn.			53.1
	Ad.			53.0
7254	R.	44	42	31.9
	H.			32.7
	Pulc.			32.3
	R. C.			32.6
	Arm.			33.2
	Ja.			33.9
	Yarn.			31.9
	Ad.			32.7
Gr. 3328	R. C.	58	11	0.4
	Arm.			0.4
	Ad.			0.4
7259	Arm.	43	54	45.0
	Ja.			45.6
	Ay. 64			44.8_1
	Yarn.			45.0_2
	Ad.			45.1

No.	Authority.	Declination.		
		°	′	″
7260	Rü.	40	13	39.0
	R. C.			41.9
	Ja.			41.7
	Wn.			40.4
	Ad.			40.8
7262	R. C.	54	2	17.4
	Yarn.			17.4
	Ay. 64			17.3
	Wn.			17.5
	Ay. 68			18.3
	Ad.			17.5
Gr. 3327	R. C.	49	3	33.4
	Arm.			35.5_2
	Ay. 60			32.4
	Ad.			33.4
XX, 401	F.	43	53	42.7_1
	Arm.			40.8_1
	H. C.			42.4_1
	Bonn.			43.3
	Yarn.			42.8_2
	Ad.			42.6
7268	R. C.	46	56	21.9
	Arm.			20.9
	Ja			22.5
	Yarn.			20.8
	Ay. 60			21.8
	R. $C._2$			20.6
	Ay. 64			20.3_2
	Wn.			21.5
	Sm.			21.4
	Ad.			21.3
7273	R. C.	44	26	40.5
	Ja.			42.9
	Wn.			40.8
	Ad.			41.4
7274	Arm.	48	42	57.8
	Ja.			56.2
	Yarn.			55.4
	Wn. 73			55.7
	Ay. 73			56.5_1
	Ad.			56.3
7278	R. C.	50	14	57.4
	Ja.			57.1
	Ou.			57.8
	Ad.			57.4
7281	Pulc.	56	24	24.7
	R. C.			25.4
	Arm.			25.1
	Q.			23.1
	Ay. 60			24.4
	Ad.			24.5
7290	R. C.	43	59	6.7
	Arm.			5.3
	Ja.			7.1
	R. $C._2$			6.2
	Yarn.			7.5
	Ay. 64			7.2
	Sm.			6.5
	Ad.			6.6

7215. In L. S. C. I overlooked Argelander's discussion (St.) of this star.
7262. P. M. + 0″.17; c. — o.: Pi. — 1″.0; Gr. + 0″.9; Gauss, + 0″.6.
XX, 401. Three observations (Ay. 74) give 42″.7.
7281. Mädler's P. M. used in declination.
7290. Wn. 67, previously overlooked, gives 6″.4.

No.	Authority.	Declination.		
		°	′	″
7294	Γ.	49	58	36.7
	Rü.			38.6
	H.			36.6
	R. C.			37.5
	Wn. -			38.4
	Leid.			37.7
	Ay. 69			37.5
	Eog.			37.5
	Ad.			37.6
7297	R. C.	39	45	53.4
	Ja.			52.8
	Yarn.			52.6
	Main.			53.5
	Wn. -			51.6
	Main 71			53.0
	Ay. 72			53.0
	Ad.			52.7
7301	Arm.	47	2	0.8
	Ay. 60			1.1
	Ay. 64			1.2
	Ay. 69–70			1.4
	Yarn.			0.1
	Wn. 73			0.7
	Ad.			1.0
7306	Pulc.	45	39	56.4
	Arm.			55.0
	Ay. 64			56 9
	Wn. -			55.7
	Ad.			56.0
7310	Arm.	58	57	3.1
	R. C.			1.9
	Pulc.			1.7
	Oom.			1.7
	Ay. 72			3.0
	Ad.			2.3
7313	T.	39	1	1.2
	R. C.			1.5
	Arm.		0	59.6
	Ay. 72		1	0.9
	Wn. 73 -			0.3
	Ad.			0.7
7317	R. C.	44	17	53.3
	Ja.			54.6
	Wn. -			53.3
	Ad.			53.7
7320	Arm.	38	9	51.1
	Q.			51.6
	R. C_2			50.5
	Ay. 64			50.7
	Ad.			51.0
7326	T.	41	8	5.8
	R. C.			4.8
	Arm.			5.1
	Ay. 72			3.8
	Ad.			4.9
7332	R. C.	52	47	17.8
	Ja.			19.7
	Yarn.			20.2
	Ad.			19.2
Gr. 3387	R. C.	54	44	1.3
	Arm.			2.3
	Ad.			1.8
7333	St. -	43	25	47.7
	Ay. 64			47.9
	Ay. 69			48.0
	Ay. 71			48.2
	Main			46.8
	Ad.			47.7
7337	Ay. 64	38	8	0.0
	Ay. 69			0.5
	Ay. 71			0.6
	Ad.			0.3
F. 3689	Oom.	59	45	32.0
	Ay. 64			31.9
	Ad.			32.0
7345	Arm.	47	8	48.0
	Ay. 60			48.4
	Yarn.			48.2
	Eng.			48.4
	Ad.			48.3
R.C.5132	A. Z.	47	10	56.0
	R. C.			56.8
	H. C.			56.7
	Ad.			56.6
7365	T.	53	3	11.0
	H.			11.1
	R. C.			11.6
	Arm.			12.0
	Pulc.			11.9
	Wn. -			11.2
	Leid.			11.9
	Ay. 69			12.2
	Eng.			12.0
	Ad.			11.7
7373	T.	36	7	6.5
	Rü.			4.4
	Arm.			5.3
	Main			5.2
	Ad.			5.5
7377	St.	59	28	22.6
	Yarn.			22.4
	Pulc.			23.0
	Ad.			22.7
7383	C. A.	40	37	45.5
	T.			45.2
	R. C.			44.5
	R. C_2			44.1
	Yarn.			44.5
	Wn. -			44.1
	Ad.			44.7

7297. P. M. + 0″.20 from Gr.
7301. Double weight to Ay. 64 (21 observations).
7310. Auwers gives 4″.6 from one observation of Bradley; Bessel 1815, 1″.4. I have assumed no P. M.
7320. Later observations change the adopted value to 50″.8 and the class to A.
7326. P. M. used. — 0″.04.
7365. P. M. — 0″.025; c. — o.: Pi. — 0″.5; Gr. — 0″.2.
7383. P. M. + 0″.05; c. — o.: (Pi.) = + 1″.7

No.	Authority.	Declination.	No.	Authority.	Declination.
		° ′ ″			° ′ ″
7385	St.	37 30 45.9	7448	R. C.	51 7 12.8
	R. C_2	45.5		Ja.	12.7
	Ay. 73	46.0		Paris	11.7
	Wn. 73	46.3		Ad.	12.3
	Ad.	45 9			
7387	T.	59 34 55.6	7453	Arm.	36 7 40.6
	R. C.	56.6		Yarn.	41.6
	Arm.	57.1		Ay. 64	40.8
	R. C_2	55.8		Main	42.1
	Oom.	56.2		Ad.	41.1
	Ay. 64	56.6			
	Ad.	56.3	Gr. 3447	R. C.	48 57 28.2
				Ay. 60	27.7
7398	Ay. 60	38 52 17.7		Ad.	27.9
	Paris	17.9			
	Ay. 72	16.9	7455	Pulc.	46 10 24.3
	Ad.	17.6		Arm.	23.9
				R. C.	24.2
Gr. 3424	H.	42 9 37.2		Ay. 64	25.0
	R. C.	38.7		Wn. 73	24.3
	Ad.	37.9		Ad.	24.3
7399	Arm.	34 22 22.3			
	Q.	24.6	7462	T.	36 34 27.3
	R. C_2	22.0		R.	27.3
	Yarn.	21.9		H.	27.3
	Ad.	22.7		Arm.	26.9
				Yarn.	27.7
7401	T.	55 16 23.4		Ay. 70	26.8
	H.	24.0		Main	27.5
	R. C.	26.5		Ad.	27.3
	Arm.	24.6			
	Yarn.	23.7	7465	T.	31 40 43.0
	Ay. 64	24.6		H.	41.8
	Ad.	24.5		Pulc.	42.4
				Arm.	43.3
7402	Arm.	43 25 14.1		Q.	42.8
	Yarn.	14.2_2		Main	41.9_1
	Ja.	14.0		Ad.	42.6
	Ay. 64	13.9			
	Ad.	14.1	7468	T.	52 21 21.1
				R. C.	22.8
7411	H.	48 58 56.3		Arm.	22.9
	Pulc.	56.8		R. C_2	22.7
	R. C.	56.3		Pulc. V. C.	21.9
	Ja.	57.2		Ad.	22.0
	Ay. 60	55.4			
	Ad.	56.4	7469	T.	45 52 21.9_1
				H.	22.8
7417	H.	58 5 43.8		R. C.	23.4
	R. C.	43.8		Ay. 45	23.8
	Arm.	42.0		Ad.	23.1
	Ja.	43.7			
	Yarn.	42.6_2	XXI, 159	T.	46 1 3.9
	Sm.	42.8		R. C.	3.0
	Ay. 68	42.8		Arm.	2.7
	Ad.	43.1		Ay. 45	2.7
				Ad.	3.1
7431	H.	48 51 14.4			
	R. C.	15.6	7476	T.	59 12 24.9
	Pulc.	14.2		R. C.	25.4
	Ja.	14.8		Arm.	25.6
	Ay. 60	13.8		Oom.	23.2
	Yarn.	14.6_2		Ad.	24.4
	Ad.	14.6			

7385. St. has been corrected by $+1''$, besides the systematic correction of $+0''.4$.
7387. P. M. $-0''.04$; c. $-$ o.: Pi. $+1''.0$; Gr. $-0''.8$.
7398. Paris has double weight.
7448. P. M. $-0''.03$; c. $-$ o.: (Gr.) $+0''.3$.
7462. The catalogue has $27''.5$.
7465. P. M. $+0''.03$ from Pi. Later observations (Main's) give $44''.2$. I should now adopt $43''.7 + 0''.06\,(t-1875)$.
7468. Pi. and Gr. agree to $-0''.4$ and $-0''.3$ (c. $-$ o.) respectively, without P. M.
7469. c. $-$ o.. Pi. $+0''.2$; no P. M.

No.	Authority.	Declination.	No.	Authority.	Declination.
		° ′ ″			° ′ ″
7477	R. C.	43 47 31.2	7505	Arm.	37 58 28.7
	Ja.	30.1		$R. C._2$	28.2
	Ad.	30.7		Ay. 64	27.6
				Wn. 67	28.2
7480	St.	45 59 24.3		Ay. 68	27.2
	Pulc.	23.7		Ay. 71	27.2
	Ad.	24.0		Wn. 73	26.9
				Yarn. 73	26.7_1
R.C.5252	A. Ö.	45 52 42.5		Ad.	27.6
	Ay. 45	44.5			
	R. C.	44.5	7512	R. C.	51 8 31.2
	Ad.	44.3		Ja.	31.8
				Ou.	31.5
7483	H.	52 24 30.7		Ad.	31.5
	R. C.	30.8			
	Pulc.	30.3	7521	St.	39 51 10.1
	Arm.	29.3		Yarn.	10.0_2
	Ja.	31.6		Pulc.	9.0
	Q.	28.1_1		Ad.	9.6
	Ad.	30.3			
			7524	T.	38 45 18.4
7488	R. C	51 38 35.8		R. C.	19.4
	Ja.	36.1		Arm.	19.4
	Ou.	35.6		Yarn.	20.0
	Ay. 64	34.4		Wn. 67	19.4
	Wn.	34.3		Wn. 72	18.4
	Ad.	35.2		Wn. 73	19.4
				Ad.	19.2
7489	R. C.	52 4 8.6			
	Ja.	8.4	D. M.	H. C.	50 30 9.1
	Ou.	7.8	+50°.3382	Bonn.	10.6_1
	Ad.	8.3		Ad.	9.6
7494	T.	58 51 59.4	7530	R. C.	53 28 46.9
	H.	56.3		H. C.	45.8
	R. C.	57.4		Ad.	46.4
	Arm.	58.4			
	$R. C._2$	55.1	Gr. 3524	R. C.	49 13 56.7
	Oom.	57.4		Ay. 60	55.3
	Ad.	57.4		Ad.	56.0
7495	H.	59 54 31.6	Gr. 3533	A. Z.	51 47 50.0
	Pulc.	31.8		R. C.	50.8
	R. C.	31.9		H. C.	48.5_1
	Ja.	30.6		Ad.	50.0
	Ay. 60	30.6			
	Ad.	31.3	7544	Arm.	42 42 [21.8]
				Pulc.	25.7
7496	H.	47 53 32.7		Ay. 60	25.7
	R. C.	33.2		Ay. 64-72	24.2
	Ja.	32.5		Yarn.	24.2_2
	Sm.	31.7		Ad.	25.0
	Ay. 69	32.0			
	Leid.	31.9	7545	St.	56 55 26.9
	Eug.	32.0		Paris	26.3
	Ad.	32.3		Main	26.9
				Pulc.	27.1
7501	R. C.	45 18 0.2		Ad.	26.9
	Arm.	0.3			
	Ja.	1.7	7548	R. C.	49 6 58.9
	Ay. 64	0.5		Ja.	58.8
	Wn.	17 59.9		Ay. 60	58.5
	Sm.	59.6		Wn. 73	57.8
	Ad.	18 0.4		Ad.	58.7
7503	Pulc.	45 2 23.7	7554	Arm.	40 14 17.8
	Yarn.	23.2		R. C.	18.9
	Ay. 60	22.9		Pulc.	18.2
	Main	23.6_1		Ay. 64	17.2
	Ad.	23.3		Ad.	18.0

7488. P. M. (from Gr.) + 0″.07.
7496. With P. M. — 0″.03 the declination for 1875.0 would be 31″.7.
7505. Weight of Ay. 64, 2; of Ay. 71 (70 and 72), 1½; the catalogue has 27″.8.

No.	Authority.	Declination.		
		°	′	″
7555	Rü.	54	18	15.4
	R. C.			14.6
	Ja. -			16.2
	Wn. 73			14.4$_2$
	Ad.			15.2
Gr. 3550	R. C.	59	11	2.5
	Oom.			1.8
	Ad.			2.1
7559	Pulc.	40	30	25.0
	R. C.			25.8
	Arm.			25.2
	Ay. 64			25.7
	Ad.			25.4
7560	Ou.	50	37	10.9
	Yarn.			10.9
	Ay. 60			11.1
	Ay. 69			11.3
	Leid.			10.9
	Eng.			10.8
	Wn. 73 -			10.5$_2$
	Ad.			11.0
Gr. 3554	A. Z.	51	43	16.7
	R. C.			17.1
	H. C.			17.5
	Ad.			17.3
7565	R. C.	40	35	4.0
	Arm.			3.2
	Yarn.			4.4
	Ay. 64			2.8
	Ad.			3.6
Gr. 3556	R. C.	49	1	47.3
	Ay. 60			47.0
	Ad.			47.1
7566	Arm.	37	42	43.5
	Yarn.			43.0
	Wn. -			43.3
	Sm.			44.2
	Ad.			43.5
Rü. 9430	Ay. 40	37	44	1.2
	Rü.		43	59.2$_1$
	Arm.		44	2.3
	H. C.			1.5
	Yarn.			1.2$_2$
	Ad.			1.2
7582	T.	58	12	27.4
	H.			25.4
	R. C. -			27.0
	Arm. -			26.2
	R. C.$_2$			26.6
	Bonn.			26.1
	Ad.			26.4
7589	R. C.	51	41	31.8
	Ja.			33.0
	Ou.			32.7
	Ad.			32.5
7593	Rü.	42	28	59.1$_1$
	Ja. -		29	2.1
	R. C.			1.7
	Ad.		29	1.3

No	Authority.	Declination.		
		°	′	″
7598	St.	48	43	53.7
	Pulc.			54.2
	Wn. 73 -			55.6
	Ad.			54.3
7602	Pulc.	38	22	34.5
	H.			35.5
	R. C.			35.2
	Arm.			36.5$_2$
	Ja. -			35.6
	Ay. 72			33.6
	Wn. 72 -			34.2
	Ad.			34.9
R.C.5408	R. C.	40	33	59.2
	H.			60.4
	Ad.			59.8
7612	R. C.	52	6	51.4
	Ja.			50.8
	Ou.			50.3
	Ad.			50.8
7614	R. C.	38	57	6.7
	Yarn.			7.9
	Ja.			7.5
	Wn. -			6.9
	Yarn. 73			7.7$_1$
	Ad.			7.3
7631	Arm.	55	12	35.7
	Ja. -			34.2
	Yarn. -			35.0
	Main			33.6$_1$
	Ay. 73			34.9$_2$
	Ad.			34.8
Gr. 3601	T.	54	27	8.8
	R. C. -			6.7
	Arm. -			8.8
	Ad.			8.1
7636	R. C.	55	37	24.9
	Arm.			25.7
	Pulc.			25.9
	R. C.$_2$			24.7
	Pulc. V. C.			26.6
	Main			24.2
	Ad.			25.5
7637	Pulc. M. C.	53	24	31.1
	R. C.			29.7
	Arm.			32.1
	Q. -			31.8
	Ay. 64 -			31.6
	Pulc. V. C.			30.6
	Ad.			31.1
7642	Arm. -	53	20	28.0
	Q.			28.8
	R. C.$_2$ -			26.6
	Ay. 64			27.4
	Ad.			27.7

7555. The catalogue has 15″.4.
7602. Gr. (R. C.) gives 33″.1. I have used no P. M.
7636. The Pulcova declination (V. C.) from Bäcklund's paper on the latitude of Lund. The P. M. is assumed = 0; c. — o.: Pi. — 1″.0; Gr. + 16″.3 (probably 0″.3).
7637. Pulc. V. C. from Bäcklund.

No.	Authority.	Declination.		
		°	′	″
7643	Rü. - -	56	1	10.7
	Ay. 40			11.2
	H.			9.4
	R. C.			9.1
	Arm.			10.4
	Ay. 60			11.5
	Paris			10.5
	Yarn.			11.7_2
	Ad.			10.6
7646	R. C.	52	39	1.9
	Ja. -			4.0
	Ad. -			2.9
R.C.5476	R. C.	45	59	52.2
	Bonn.			53.4
	Ad. -			52.6
R.C.5483	R. C.	59	12	5.3
	Oom.			3.9
	Ad.			4.4
7668	Pulc.	57	3	36.9
	Arm.			37.9
	$R. C._2$			37.1
	Ay. 64 -			37.6
	Ad. -			37.4
7676	T.	52	16	48.1
	H.			48.9
	R. C.			48.4
	Ay. 45			48.0
	$R. C._2$			48.0
	Main			49.2
	Ad.			48.5
7679	R. C.	42	12	42.2
	Ja.			41.6
	Ad.			41.9
7681	H.	44	2	53.0
	R. C.			52.6
	Ja.			53.9
	Ad.			53.2
7683	Pulc.	57	23	51.2
	Arm.			52.1
	Ay. 64			52.5
	Wn. 73 -			[53.7₁]
	Ad.			51.9
7695	R. C.	46	37	35.3
	Ja.			37.7
	Ad.			36.5
7696	Arm.	59	12	32.6
	$R. C._2$			31.1
	Oom.			32.3
	Ay. 64			32.6
	Ad.			32.2
7698	T.	59	15	38.5
	H.			40.6_1
	R. C. -			40.4
	Arm. -			41.1
	$R. C._2$			39.4
	Oom.			39.2
	Ad.			39.7

No	Authority.	Declination.		
		°	′	″
Gr. 3680	R. C.	47	37	24.3
	Bonn.			25.4
	Leid.			25.4
	Eng.			25.5
	Ay. 69			25.6
	Ad.			25.5
7705	T.	44	24	26.4
	H.			25.9
	R. C. -			25.7
	Pulc.			25.3
	$R. C._2$ -			24.9
	Ad.			25.6
7718	T.	58	13	51.2
	Rü.			51.1
	R. C.			52.1
	Ay. 45			51.0
	Arm.			51.6
	Ad.			51.4
7721	Ay. 40 -	32	33	42.8
	Pulc. M. C.			44.2
	Arm.			45.1
	Yarn.			43.3
	Ay. 60			44.2
	Main -,			44.5
	Ay. 72			44.1
	Ad.			44.0
7727	R. C.	47	19	19.9
	Ay. 45			22.0
	Ja.			22.4
	Ad.			21.4
7731	St.	32	33	55.8
	LeV.			55.9
	Wn. -			54.2
	Yarn.			54.8
	Ay. 72			55.9
	Ad.			55.3
7736	T.	58	40	53.4
	H.			52.0
	R. C.			53.0
	$R. C._2$			52.4
	Ay. 64			53.1
	Ad.			52.8
7737	T.	42	34	26.4
	R. C.			24.3
	Ay. 60			23.2_2
	Ad.			24.6
7738	T.	58	14	23.2
	R. C.			21.4
	Arm.			23.3_1
	$R. C._2$			20.1
	Ay. 64			21.1
	Ay. 68			20.0
	Ad.			21.4
7743	R. C.	42	24	59.6
	Arm.			59.4
	Ja.			59.2
	Ad.			59.4

7643. P. M. — 0″.03 from Pi.
7737. Declination uncertain.

No.	Authority.	Declination.		
		°	′	″
7746	Pulc.	50	12	22.2
	H.			22.2
	R. C.			22.2
	Ja.			22.6
	Ou. -			22.6
	Ay. 60			22.2
	Ad.			22.3
7749	St.	57	35	7.9
	Paris			8.6
	Wn. -			6.9
	Leid. -			7.8
	Ay. 69 -			7.9
	Eng.			7.5
	Ad.			7.9
7753	T.	33	59	19.7
	H.			19.6
	Arm.			20.6
	R. $C._2$			20.0
	Yarn.			19.8
	Ad.			19.8
7754	Arm. - -	56	13	6.6
	Ja. -			6.2
	Ay. 60			6.2
	R. $C._2$			4.4
	Yarn.			5.2_2
	Wn. 73 -			5.6
	Ad.			5.7
7755	Arm.	58	47	55.0
	R. C.			54.1
	Pulc.			56.5
	R. $C._2$			52.2
	Ay. 64			53.5
	Wn. 73 -			54.7_1
	Ad.			53.9
Gr. 3715	Rü.	58	27	48.9_2
	Arm.			52.1
	A. Ö.			49.8
	R. C.			51.6
	Ad. -			50.9
Gr. 3717	H. -	44	49	17.2
	R. C.			15.8
	Ad.			16.5
7765	C. A.	39	5	43.7
	R. C. -			42.4
	Arm. -			42.5
	Yarn. -			43.5
	Ay. 60			43.3
	Ay. 71			43.1
	Ay. 72			43.1
	Ad.			43.1
7770	R. C. -	42	20	4.9
	Ja.			5.1
	Ad.			5.0
7777	Arm.	37	7	35.7
	Yarn.			37.6
	Ay. 60			36.5
	Ay. 71			36.5
	Ad.			36.7

No.	Authority.	Declination.		
		°	′	″
7778	Arm.	56	25	14.9
	Yarn.			14.4
	Ay. 60			14.4
	R. $C._2$			13.4
	Ay. 64			14.8
	Ay. 69			14.2
	Leid.			14.5
	Eng.			13.7
	Ay. 71			14.2
	Ad.			14.4
7782	T.	56	35	48.3
	H.			47.7
	R. C.			50.5
	Arm.			50.0
	R. $C._2$			48.7
	Ad.			49.0
7787	R. C.	52	1	49.9
	Ja.			49.4
	Ou.			49.3
	Ad.			49.5
R.C.5653	R. C.	59	31	14.1
	Oom.			13.7
	Bonn.			14.3
	Ad.			14.0
7799	T.	56	17	24.0
	R.			24.9
	R. C.			23.4
	Wn. 73 -			22.8
	Ad.			24.1
7800	Arm.	45	54	27.1
	Pulc.			27.0
	Yarn. -			26.5
	Ay. 50, 60			26.5
	Ad.			26.8
Gr. 3750	R. C.	41	26	54.6
	Arm.			53.9
	Ad.			54.3
7803	R. C.	43	6	57.4
	Ja.			57.2
	Yarn. - -			57.2
	Ay. 60–64			56.9
	Ad.			57.2
7812	R. C.	56	39	9.9
	Ja.			10.9
	Yarn.			11.1
	Ay. 64			9.5
	Ad.			10.6
7813	T.	55	19	52.6
	Rü.			52.8
	H.			51.6
	R. C. -			52.5
	Arm.			52.6
	Wn. -			52.1
	Ad.			52.4
7815	St.	51	36	11.9
	Yarn.			11.0
	Paris - -			11.3
	Leiden - -			11.9
	Eng.			11.9
	Main			12.1
	Pulc.			11.5
	Ad.			11.7

7749. Weights: St., 4; Paris, 2; Leid., 2.
7765. The catalogue has 43″.3.
7812. The catalogue has 10″.8.
7813. P. M. — 0″.02; C. — O.: Pi. — 0″.4; Gr. + 0″.5.

No.	Authority.	Declination.	No.	Authority.	Declination.
		° ′ ″			° ′ ″
7820	Pulc.	48 50 35.1	7848	St.	57 46 32.5
	Arm.	34.8		R. C.$_2$	32.0
	Ay. 60	34.2		Ay. 64	32.7
	Wn. 73	36.9$_1$		Main	32.3
	Ad.	34.7		Ad.	32.4
7824	T.	50 37 16.3			
	R. C.	15.9	7850	Ay.	42 28 59.0
	Ou.	16.5		R. C.	60.5
	Ad.	16.1		Arm.	57.7
				Ay. 64	59.2
7825	T.	49 46 3.0		Ad.	59.1
	H.	1.2			
	R. C.	1.4			
	Arm.	1.5	7855	St.	49 38 25.0
	Ad.	1.8		Arm.	24.3
				R. C.$_2$	24.2
Gr. 3771	R. C.	53 10 51.4		Yarn.	25.2
	Ay. 45	52.5		Wn.	25.3
	Ad.	52.0		Ay. 69	25.3
				Ay. 72	25.7$_2$
Gr. 3772	R. C.	53 18 32.6		Main	25.6
	Ay. 45	33.2		Leiden	25.1
	Ad.	32.9		Eng.	25.0
				Ad.	25.0
Ll. 43886	H.	39 10 25.4			
	H. C.	24.6	7858	H.	39 8 14.2
	Ad.	25.0		R. C.	13.4
				Pulc.	13.5
XXII,113	T.	31 12 5.3		Ja.	15.2
	H.	7.3		Yarn.	13.8
	Pulc.	5.4		Bonn.	16.0$_1$
	Arm.	5.9		Ay. 60	14.6$_2$
	Ay. 71	7.0$_2$		Ay. 64	14.2
	Ad.	6.1		Ay. 72	14.5
				Ad.	14.2
Gr. 3779	A. Ö.	50 51 20.8			
	R. C.	22.3	7871	T.	55 58 [40.6]
	Arm.	19.3		H.	42.4
	Ad.	20.8		R. C.	42.2
				Arm.	41.8
Gr. 3780	R. C.	50 56 18.9		Wn.	43.4
	Arm.	17.9$_1$		Ad.	42.4
	Ad.	18.6			
			7879	Arm.	38 58 54.7
7843	R. C.$_2$	31 55 59.4		Yarn.	54.0
	Ay. 64	56 0.5		Ay. 64	53.3$_2$
	Wn.	0.0		Ad.	54.2
	Ay. 71	0.1			
	Ay. 72	0.5	7880	Arm.	38 59 16.0
	Ad.	0.1		R. C.$_2$	16.3
				Ay. 64	15.9
7845	Pulc.	47 4 3.9		Main	17.1$_2$
	R. C.	2.8		Yarn.	16.5
	Arm.	2.1		Wn.	16.6$_2$
	Ay. 60	2.2		Ad.	16.4
	R. C.$_2$	2.0			
	Ad.	2.6			
			7882	R. C.	49 25 26.1
7846	R. C.	53 36 22.7		Ja.	26.6
	Ja.	24.3		Ad.	26.3
	Yarn.	23.0$_2$			
	Wn. 73	26.4$_1$	7888	Arm.	50 54 0.3
	Ad.	23.4		Ou.	0.7
				Yarn.	0.7
7847	R. C.$_2$	57 45 52.0		Wn.	1.1
	Ay. 64	52.5		Ad.	0.7
	Main 72	51.2$_2$			
	Ad.	52.0			

7824. P. M. + 0″.03; c. — o.: Pi. — 0″.5; Gr. + 1″.1.
7858. Ay. 64 has 16 observations.
7879. In adopting 54″.2 I gave Yaro. (15 observations) a weight 1½ and took account of Dembowski's measures in connection with the following star.
7880. Yarnall has 35 observations.

No.	Authority.	Declination.		
		°	′	″
7894	T.	44	32	2.2
	R. C.			2.6
	Arm.			0.7
	Wn.			1.3
	Ad.			1.7
Gr. 3843	R. C.	43	39	43 1
	Arm.			42.8
	Ay. 60			43.4
	R. C_2			44.6
	Ad.			43.5
7901	St.	38	24	0.3
	Yarn.			1.1
	Pulc.			0.4
	Ay. 72		23	59.7
	Ad.		24	0.4
Gr. 3849	R. C.	40	39	45.1
	Arm.			47.3
	Ad.			46.2
7906	Arm.	43	37	26.1
	Ay. 60			27.3
	R. C_2			27.6
	Ay. 64			26.7
	Ay. 69			26.8
	Ad.			26.9
7913	Ay. 40	44	21	21.0
	R. C.			21.4
	Arm.			21.8
	Wn.			21.5
	Ad.			21.5
7915	Arm.	39	34	24.2
	Pulc.			22.5
	R. C.			23.0
	Yarn.			23.4
	Wn. 67			22.0
	Wn. 73			22.4
	Ad.			22.9
7917	R. C.	40	53	39.9
	Arm.			39.0
	Ja.			40.3
	Ad.			39.7
Gr. 3867	T.	43	52	32.3
	R. C.			33.0
	Arm.			30.4
	Ad.			31.9
7931	R. C.	38	48	39.5
	Arm.			38.2
	Ja.			40.8
	Ad.			39.5
7932	St.	41	9	49.8
	Yarn.			48.8
	Pulc.			48.3
	Ad.			49.0
Gr. 3877	R. C.	51	51	37.5
	Arm.			35.9
	Ad.			36.7

No.	Authority.	Declination.		
		°	′	″
7948	R. C.	43	53	14.7
	Ay. 45			14.4
	Arm.			13.7
	Ja.			13.4
	Yarn.			14.9
	Ad.			14.2
7950	T.	45	33	29.4
	R. C.			29.4
	Arm.			29.4
	R. C_2			30.1
	Yarn.			27.5
	Q.			29.3_1
	Ad.			29.2
7953	R. C.	57	49	26.5
	Arm.			25.5
	Ja.			25.7
	Yarn.			26.3
	Wn.			26.1
	Ad.			26.0
7961	Pulc	55	14	23.4
	R. C.			23.9
	Arm.			22.9
	Ja.			23.8
	Ay. 60			24.0
	Q.			24.0_2
	Ad.			23.6
7962	Pulc.	41	17	30.3
	Arm.			30.7
	Ay. 45			31.7
	R. C.			30.9
	Ad.			30.9
Gr. 3901	Ay. 40	50	0	55.5
	R. C.			55.2
	Ad.			55.4
Ll. 44750	A. Ö.	48	4	15.3
	H. C.			14.6
	Ad.			14.8
7972	Arm.	42	38	53.7
	Ay. 60			54.4
	R. C_2			55.1
	Ay. 64–71			53.3
	Ad.			54.1
Gr. 3913	Ay. 40	50	2	30.3
	R. C.			29.3
	Ad.			29.8
7978	R. C.	39	30	13.2
	Ja.			14.0
	Yarn.			13.2
	Ad.			13.5
7983	Pulc.	44	5	5.6
	H.			6.1
	R. C.			6.4
	Arm.			4.7
	Ja.			7.1
	Yarn.			4.7
	Paris			4.7_2
	Ad.			5.7

Gr. 3843. P. M. + 0″.05 from Gr.
7906. Ay. 64 has weight 1½.
7913. P. M. + 0″.03 from Pi. and Gr.
7917. P. M. + 0″.07 from Gr.
Gr. 3867. I have corrected T. by — 37″.5, 2 years' precession.

No.	Authority.	Declination.	No.	Authority.	Declination.
		° ′ ″			° ′ ″
7984	Pulc.	39 42 38.8	Gr. 3965	R. C.	54 33 49.2
	R. C.	38.8		Arm.	49.2
	Arm.	38.2		Ad.	49.2
	Ja.	38.0			
	Ay. 71	38.7	8033	R. C.	59 46 22.7
	Ay. 73	38.5		Arm.	22.7
	Ad.	38.5		Oom.	21.1
				Ad.	22.2
7994	Arm.	40 56 13.4			
	Yarn.	13.6	8036	Arm.	49 22 21.9
	Ay. 64	12.7		Q.	22.9
	Wn. 67	14.0		Ay. 64	22.1
	Ad.	13.4		Wn.	22.3
				Ad.	22.3
7995	Pulc.	49 4 0.1			
	H.	3 59.1	8054	Pulc.	58 44 39.5
	R. C.	59.0		Arm.	40.6
	Arm.	58.2		Yarn.	39.7
	Ja.	59.3		Ad.	39.9
	Ay. 60	59.0			
	Q. 60	4 0.0$_1$	8056	R. C.	45 23 31.5
	Ad.	3 59.2		Arm.	31.4
				Ja.	31.8
7999	R. C.	48 0 59.0		Ay. 64	30.9
	Ay. 45	1 0.2		Yarn.	32.8$_2$
	Arm.	0 58.8		Ad.	31.6
	Ja.	0 59.1			
	Bonn.	59.5	Gr. 3990	R. C.	59 3 6.7
	Leid.	59.7		Oom.	5.7
	Ay. 69	59.6		Ad.	6.0
	Ay. 70	59.5			
	Eng.	1 0.0	8058	Pulc.	45 42 45.0
	Ad.	0 59.6		Arm.	43.7
				R. C.	46.0
Gr. 3936	T.	38 38 29.1		Ay.	44.1
	H.	28.5		Paris	44.1
	R. C.	27.5		Ad.	44.6
	Arm.	26.7			
	Yarn.	26.4	8059	Pulc.	48 36 54.7
	Ad.	27.6		Arm.	54.1
				R. C.$_2$	53.7
8013	R. C.	59 8 43.6		Ay. 64	54.6
	Arm.	43.7		Ad.	54.3
	Ja.	44.7			
	Oom.	42.8	8075	Ay. 40	58 39 17.4
	Ad.	43.7		R. C.	17.7
				Pulc.	19.1
Gr. 3947	R. C.	44 42 16.1		Arm.	18.3
	Ay. 45	16.4		R. C.$_2$	17.6
	Ad.	16.2		Ad.	18.0
8023	St.	41 39 16.3	8076	Pulc.	42 52 23.0
	Ay. 69	16.2		Arm.	22.5
	Leid.	16.1		Yarn.	23.1
	Ad.	16.2		R. C.$_2$	24.0
				Ay. 64	22.4
8024	Pulc.	56 26 3.6		Ad.	23.0
	Arm.	3.3			
	Q.	1.8$_1$	8082	Pulc.	48 43 25.1
	Sm.	2.9		Arm.	25.9
	Ad.	3.1		Ay. 60	24.8
				Yarn.	24.7
8028	Pulc.	42 5 8.3		LeV.	24.3
	Yarn.	8.0		Eng.	24.7
	Arm.	7.5		Ad.	24.9
	Ay. 64	8.3			
	Ad.	8.0	8083	St.	56 28 41.7
				Sm.	42.6
Gr. 3964	R. C.	59 10 50.8		Pulc.	42.0
	Arm.	50.6		Ay. 73	42.2
	Oom.	49.8		Ad.	42.0
	Ad.	50.0			

7995. P. M. — 0″.03 from Gr.

Gr. 3936. Groombridge and Piazzi do not agree in declination. P. M. about — 0″.10 by Pi. and + 0″.03 by Gr. I have used none.

No.	Authority.	Declination.		
		°	′	″
Gr. 4017	R. C.	49	56	16.1
	Arm.			16.7
	Ad.			16.4
Gr. 4020	R. C.	45	50	39.3
	Arm.			38.0
	Ad.			38.7
8107	Arm.	52	32	21.1
	Pulc.			22.0
	Q.			23.2
	R. C_2			22.6
	Leid.			23.3
	Eng.			22.7
	Ay. 69			22.9
	Ad.			22.7
8110	Pulc.	44	29	2.1
	R. C.			2.4
	Arm.			1.7
	Ja.			4.2
	Ad.			2.6
8114	Pulc.	48	19	57.7
	Arm.			58.0
	Ay. 60			56.0
	Ad.			57.2
8115	R. C.	44	48	23.6
	Arm.			25.8
	Ja.			25.4
	Ad.			24.9
8118	Arm.	41	5	27.5
	R. C.			27.6
	Pulc.			27.8
	Ay. 64–71			28.8
	Ad.			27.9
8125	Arm.	47	56	[21.0]
	Ay. 64			24.0
	Ay. 69			23.4
	Eng.			23.9
	Ad.			23.8
8126	Arm.	47	41	46.5
	R. C.			44.8
	Ay. 64			46.7
	Ay. 69			46.6
	Leid.			46.5
	Eng.			46.0
	Ay. 72–3			45.8_2
	Ad.			46.2
8128	Arm.	41	23	38.6
	R. C.			39.1
	Ay. 64			37.9
	Wn. 73			38.5
	Ad.			38.5
8135	R. C.	43	25	59.3
	Arm.		26	1.4
	Ja.		25	59.6
	Sm.		26	0.7
	Ad.			0.1
Gr. 4043	R. C.	59	35	26.3
	Oom.			26.7
	Ad.			26.5

No.	Authority.	Declination.		
		°	′	″
8136	Pulc.	37	30	0.2
	Arm.		29	59.8
	R. C_2		30	0.0
	Ay. 64			0.8
	Wn.			0.7
	Yarn.			0.6
	Ad.			0.3
8139	Arm.	37	53	54.5
	Ja.			54.8
	Sm.			53.3
	Main 70			52.8_1
	Ay. 72			54.1_1
	Ad.			54.0
8141	Arm.	31	7	40.9
	Ay. 64			39.8
	Pulc.			39.1
	Ay. 72			39.7
	Yarn.			42.3_2
	Ad.			40.2
8153	Arm.	59	26	53.5
	Ja.			54.5
	Oom.			55.0
	Ad.			54.?
8156	Arm.	31	50	38.4
	Q.			39.3
	R. C_2			38.5
	Ay. 64			38.3
	Ad.			38.6
Gr. 4052	R. C.	40	55	37.2
	Rü.			35.8_1
	H. C.			37.4
	Ad.			37.0
8158	R. C.	56	50	58.9
	Arm,			58.8
	Ja.			60.0
	Yarn.			58.4_2
	Ad.			59.0
8159	Arm.	31	41	55.1
	Q.			54.9
	R. C_2			53.8
	Ay. 64			55.0
	Yarn.			54.2
	Wn. 73			54.0
	Ad.			54.5
8171	R. C.	42	13	27.1
	Ay. 45			27.1
	Pulc.			26.3
	Yarn.			24.8
	Ad.			26.3
Gr. 4074	R. C.	45	46	37.6
	Arm.			37.3
	Ad.			37.0
8188	T.	57	51	37.0
	R.			35.3
	R. C.			36.1
	Ay. 45			35.7
	Arm.			35.7
	Ay. 60			35.4
	Ay. 64			36.5
	Ad.			35.9

Gr. 4043. P. M. — 0″.03, Gr.
8139. Later Greenwich observations give about 1″ less.

No.	Authority.	Declination.	No.	Authority.	Declination.
		° ′ ″			° ′ ″
8195	Arm.	38 32 59.8	8245	Ay. 40	44 17 58.7
	R. C.$_2$	58.5		R. C.	58.2
	Ay. 64	58.0		Ja.	58.9
	Ay. 72	59.3		Q.	56.8
	Ay. 73	58.9		Ad.	58.2
	Main	60.2			
	Wn. 73	59.9	8252	Arm.	52 27 32.5
	Ad.	59.3		Yarn.	33.2
				Ay. 68	33.5
Gr. 4083	T.	43 22 57.4		Sm.	33.3
	R. C.	56.8		Ad.	33.0
	Rü.	55.3			
	Arm.	55.6	Arg. 246	Arg.	57 22 12.1
	Ad.	56.3		Ad.	12.1
			Gr. 4136	T.	55 6 21.7
8206	St.	30 38 7.5		R. C.	21.7
	Ay. 64	7.8		Pulc.	22.4
	Pulc.	7.3		Arm.	20.9
	Main	7.2		Ad.	21.7
	Wn. 73	8.5			
	Ad.	7.6	8261	Pulc.	45 43 34.7
				Arm.	34.9
8211	Pulc.	32 48 20.5		Ay. 60	34.9
	Arm.	22.0		Ad.	34.8
	Ay. 64	20.8			
	Main	20.7	8268	Arm.	57 57 21.7
	Ad.	21.0		Ay. 60	20.6
				Ay. 64	20.8
8212	Arm.	39 32 51.8		Yarn.	20.2
	R. C.	51.1		Ad.	20.8
	Ay. 72	50.4			
	Ad.	51.1	Gr. 4139	R. C.	46 8 18.0
				Arm.	18.3
8223	R. C.	43 44 17.3		Ad.	18.1
	Yarn.	15.7$_2$			
	Ay. 68	15.9	8280	Arm.	59 17 1.3$_2$
	Ad.	16.4		Yarn.	1.0$_2$
				Oom.	0.8
8224	St.	45 46 51.7		Sm.	0.1
	R. C.$_2$	50.2		Wn. 72	0.9
	Paris	51.4		Ad.	0.8
	Ad.	51.3			
			8282	Pulc.	58 16 7.2
8229	St.	42 34 34.3		Arm.	6.1
	Ay. 64	33.9		Ja.	8.4
	Ay. 68	34.2		Ay. 64–68	7.1
	Yarn.	33.7		Ad.	7.2
	Paris	34.5			
	Ad.	34.1	8289	T.	50 55 38.8
				R.	41.0
Gr. 4110	R. C.	57 57 46.0		R. C.	39.9
	Arm.	46.1		Ou.	39.5
	Ad.	46.0		Arm.	39.2
				R. C.$_2$	39.3
8231	Pulc.	49 46 47.0		Ad.	39.6
	Arm.	47.0	8307	T.	50 49 37.0
	Ou.	47.2		R. C.	39.5
	Ad.	47.0		Ou.	38.4
				Arm.	37.7
8237	Ay. 42	43 38 32.4		Wn. 73	37.6
	R. C.	31.8		Ad.	37.8
	Pulc.	31.6			
	Pulc. M. C.	30.9	8310	St.	56 49 14.1
	Ay. 60	30.7		Y.	13.7
	Ad.	31.5		Pulc.	13.6
				Ad.	13.8
Gr. 4125	R. C.	48 49 12.3			
	Rü.	10.6$_1$	8316	T.	52 2 19.7
	Arm.	13.2		R.	19.3
	Ad.	12.3		H.	19.3
				R. C.	20.7
				Arm.	21.1
				Ad.	20.0

8229. Professor Yarnall's value is taken from the *second* edition of his catalogue.

No.	Authority.	Declination.		
		°	′	″
8317	Arm.	56	42	58.5
	Pulc.			58.9
	Yarn.			60.2
	Ay. 64			58.4
	Ad.			59.0
Gr. 4172	H.	41	57	45.2$_1$
	R. C.			45.3
	Pulc.			45.1$_2$
	Arm.			44.3
	Ad.			44.9
8322	R. C.	55	0	38.3
	Pulc.			36.9
	Arm.			37.2
	Ay. 40			39.4
	Ad.			37.9
8326	T.	49	44	35.5
	H.			35.6
	R. C.			35.4
	Ay. 45			34.7
	Ad.			35.3
8330	Ay.	55	3	33.0
	R. C.			32.9
	Pulc.			32.4
	Arm.			33.1
	Yarn.			33.4$_2$
	Maio			31.5
	Ad.			32.7
Gr. 4190	T.	49	50	1.5
	R. C.			0.7
	Ay. 45			3.0
	Ad.			1.7
R.C.6254	R. C.	58	51	52.5
	Oom.			52.3
	Ad.			52.4
8345	Pulc.	41	40	16.7
	H.			17.2
	R. C.			15.4
	Ja.			16.7
	Ad.			16.5
Gr. 4207	R. C.	42	3	7.5
	Ay. 45			7.5
	Ay. 64			7.6
	Ad.			7.6
Gr. 4216	R. C.	49	10	27.5
	Ay. 60			27.7
	Ad.			27.6
8364	R. C.	57	50	9.9
	Arm.			10.0
	Pulc.			9.2
	Ay. 68			9.9
	Sm.			9.8
	Ad.			9.8
8372	R. C.	57	44	22.7
	Pulc.			23.4
	Arm.			22.7
	Yarn.			22.5
	Sm.			22.1
	Ad.			22.7

No.	Authority.	Declination.		
		°	′	″
Gr. 4237	Rü.	39	27	11.3$_2$
	R. C.			10.3
	Arm.			10.7
	Ad.			10.7
7	St.	58	27	36.4
	R. C.$_2$			36.2
	Wn.			[34.3]
	Main			36.0
	Ay. 71–72			37.5
	Ad.			36.4
Gr. 4243	R. C.	45	41	34.2
	Arm.			33.2
	Ad.			33.7
13	R. C.	45	41	43.0
	Arm.			42.3
	Ja.			45.5
	Ad.			43.6
Gr. 2	R. C.	51	33	34.8
	Arm.			36.0$_1$
	Ad.			35.2
16	St.	45	22	35.7
	Pulc.			35.3
	Main			35.1
	Ad.			35.4
18	Arm.	58	58	[35.9]
	Pulc.			39.9
	Sm.			38.7
	Ad.			39.3
Gr. 9	R. C.	47	27	22.4
	Arm.			21.9
	Ad.			22.1
Gr. 13	R. C.	44	0	45.7
	Arm.			45.4
	Ad.			45.1
28	Yarn.	40	20	42.5$_2$
	Arg.			43.8
	Ay. 64			42.1
	Sm.			43.0
	Wn. 73			42.6
	Ad.			42.8
Gr. 24	T.	40	20	10.5
	R. C.			10.8
	Arm.			11.4
	Ad.			10.9
51	Rü.	47	15	7.1
	R. C.			6.2
	Arm.			7.0
	Ja.			9.1
	H. C.			7.3
	Ad.			7.3
52	Arm.	37	59	15.6
	R. C.$_2$			15.5
	Pulc.			15.1
	Yarn.			15.0
	Ay. 71			15.1
	Ad.			15.3

8326. P. M. + 0′.23.

No.	Authority.	Declination.	No.	Authority.	Declination.
		° ′ ″			° ′ ″
54	Ay. 40	50 44 19.4	100	T.	43 42 10.1
	R. C.	19.5		R. C.	10.6
	Arm.	18.1		Arm.	9.3
	Ja.	19.3		Paris	9.9$_3$
	Ad.	19.1		Ad.	10.0
58	Arm.	36 5 31.7	Gr. 74	T.	43 15 22.6
	Pulc.	30.9		Ay. 40	21.6
	Ay. 64–71	30.8		R. C.	21.7
	Main	32.2		Ad.	22.0
	Wn.	32.8			
	Ad.	31.5	120	H.	32 53 30.6
				Arm.	29.1$_1$
60	Arm.	43 5 48.7		Ja.	28.3
	Pulc.	48.6		H. C.	29.7
	Ay. 60	48.9		Ay. 64	29.5
	Wn. 67	47.7		Main	29.6
	Ad.	48.5		Sm.	29.0
				Ad.	29.4
67	Arm.	37 16 33.9			
	Pulc.	33.4	121	Pulc.	53 49 54.5
	Yarn.	34.9		Arm.	54.7
	Ay. 64	33.6		Ay. 60	54.9
	Ay. 68–69	34.3		Main	54.8$_2$
	Leid.	33.3		Wn. 73	55.2
	Eng.	34.2		Ad.	54.8
	Ay. 72	33.6			
	Ad.	33.9	123	Ay. 40	53 7 29.4
				R. C.	28.4
Gr. 55	R. C.	53 57 7.4		Arm.	29.2$_1$
	Arm.	7.5		Ja.	29.3
	Rü. 2	7.9		Ad.	29.1
	Ad.	7.5			
			Gr. 86	R. C.	53 25 52.3
78	R. C.	43 34 17.0		Ay. 50	52.7$_1$
	Ay. 45	16.7		Ad.	52.4
	Arm.	16.0			
	Ja.	18.1	Gr. 96	T.	53 30 48.9
	LeV. 64	18.1		R. C.	49.9
	Ad.	17.2		Arm.	50.4$_1$
				Ay. 60	50.0
79	R. C.	51 19 37.8		Ad.	49.7
	Arm.	37.0			
	Ja.	39.4	146	Arm.	53 28 44.0
	Ay. 64	37.2		Pulc.	46.1
	Ad.	37.8		Ay. 60	45.8
				Wn. 73	46.8
83	Pulc.	52 21 14.4		Ad.	45.7
	Arm.	14.0			
	Ja.	15.4	148	R. C.	59 38 15.4
	Yarn.	14.3		Arm.	14.4
	Sm.	14.8		Ja.	15.6
	Ad.	14.6		Oom.	14.6
				LeV.	14.9
R. C. 93	R. C.	56 5 18.5		Ad.	15.0
	Arm.	18.0			
	Ad.	18.3	152	Pulc.	43 47 54.2
				Rü.	55.3$_1$
92	Arm.	55 56 56.8		R. C.	55.1
	Pulc.	56.4		R.	54.1
	Yarn.	56.8		Ay. 60	55.7
	Ay. 68	55.4		Ad.	54.8
	Wn. 73	55.1			
	Ad.	56.1	153	St.	53 12 30.6
				Wn.	31.9
Gr. 64	R. C.	49 17 37.7		Ay.	31.5
	Rü. 2	36.6		Leid.	31.0
	Ay. 60	38.3		Eng.	30.7
	Yarn.	36.2		Yarn.	30.4$_2$
	Ad.	37.2		Ad.	31.0

121. Arm. corrected by $-10''$.
Gr. 96. P. M. $-0''.03$ (Pi., Gr.).

No.	Authority.	Declination.		
		°	′	″
155	St.	33	1	51.9
	Yarn.			50.0_2
	Ay. 72			51.6_2
	Ad.			51.4
158	Arm.	34	42	42.7
	Ay.			41.5
	Main			41.9
	Wn.			41.3
	Yarn.			41.3
	Ad.			41.7
Gr. 108	R. C.	59	38	13.4
	Arm.			12.6_1
	Oom.			12.8
	Ad.			13.0
165	R. C.	48	40	1.1
	Arm.			1.2
	Ja.			2.0
	Ay. 64			0.5_1
	Ay. 68			1.9
	Ad.			1.4
166	St.	30	10	35.9
	Yarn.			36.7
	Ay. 72			36.4
	Wn. 73			36.0
	Ad.			36.1
173	Arm.	38	46	20.2
	Yarn.			20.2
	Pulc.			19.6
	R. $C._2$			20.5
	Ay. 64			20.3
	Wn. 73			19.1
	Ad.			20.0
180	Arm.	49	49	35.7
	Bonn.			35.5
	Ay. 64			36.0
	Wn.			35.8
	Leid.			36.0
	Eng.			35.8
	Ay. 69			35.6
	Ad.			35.8
181	Arm.	40	0	16.6
	Pulc.			17.9
	Ja.			18.1
	Ay. 64			16.4
	Ad.			17.2
182	Pulc.	58	4	3.9
	Arm.			4.8
	Main			4.7
	Ad.			4.5
Gr. 125	R. C.	51	39	5.6
	Arm.			4.2
	Ad.			4.9
189	Arm.	46	20	25.5
	Pulc.			26.8
	Ay. 60			26.4
	Leid.			25.4
	Eng.			26.0
	Ay. 68–9			24.7
	Ad.			25.8

No.	Authority.	Declination.		
		°	′	″
197	Arm.	47	10	43.4
	R. C.			41.9
	Ja.			43.8
	Ay. 64			43.9
	Sm.			43.1
	Ad.			43.2
198	St.	47	35	59.6
	Ay. 69			59.0
	Leid.			60.0
	Eng.			60.0
	Pulc.			59.0
	Ad.			59.5
201	R. C.	54	32	11.8
	Arm.			12.2
	Wn. 73			11.7
	Ad.			11.9
Gr. 142	T.	50	45	43.6
	R. C.			45.3
	Arm.			42.8
	Rü. 2			44.3_1
	Ou.			44.4
	Main			43.6_2
	Ad.			44.0
218	St.	57	9	7.8
	R. $C._2$			7.4
	Ay. 64			8.2
	Eng.			7.8
	Arg.			8.3
	Sm.			7.5
	Ay.			8.5
	Main			7.5
	Ad.			7.7
219	Arm.	50	17	8.0
	Pulc.			9.2
	Yarn.			8.4
	Ay. 60			10.0
	Ad.			8.9
226	R. C.	47	4	58.0
	Ja.			59.1
	Ad.			58.6
227	Arm.	40	23	52.3
	Pulc.			52.2
	Yarn.			52.0
	Ay. 72			53.0_2
	Paris			52.3
	Ad.			52.3
232	R. C.	50	49	38.3
	Ou.			37.1
	Arm.			36.1
	R. $C._2$			37.0_1
	Wn. 73			36.7
	Ad.			37.0
235	R. C.	50	53	27.9
	Arm.			26.6
	Ou.			26.6
	Wn. 73			27.6
	Ad.			27.2
244	Arm.	58	17	41.9
	Yarn.			43.5
	Pulc.			42.6
	Ad.			42.7

No.	Authority.	Declination.	No.	Authority.	Declination.
		° ′ ″			° ′ ″
245	R. C.	47 59 59.9	314	Ay. 40 -	54 18 20.9
	Ay. 50	48 0 1.7		Ay. 45	20.1
	Ja. - - -	0.8		R. C.	21.5
	Ay. 60–64	0.0		Pulc.	21.1_2
	Bonn.	1.4		Ay. 60	22.3
	Ay. 69	0.3		Paris	22.5
	Leid.	1.6		Ad	21.3
	Eng.	1.2			
	Ad. -	1.0	318	Arm.	43 16 30.6
				R. C.	30.8
254	T. - -	58 30 20.8		Pulc.	32.3
	Pulc.	18.3		Ay. 60	32.1
	R. C.	18.8		R. C_2	32.1
	Arm. -	17.9		Ad.	31.6
	Ay. 68	18.5			
	Ad.	18.7	321	Arm. - -	31 20 40.6
				Pulc. -	39.4
255	R. C.	59 41 8.7		R. C.	37.9
	Ja. -	9.1		Ay. 64 -	40.1
	Oom.	7.3		Ad.	39.5
	Ad.	8.4			
			330	Arm.	46 34 27.5
259	St.	37 49 15.3		R. C.	28.4
	R. C_2	14.9		Ay. 60	29.0
	Ay. 64 - -	15.1		Ad.	28.3
	Ay. 68–9 -	14.8			
	Eng.	16.0	334	St.	34 57 26.8
	Arg. -	15.9		R. C_2	26.7
	Main	15.7		Ay. 64	26.7
	Sm. - - -	15.6		Ay. 69	26.7
	Ay. 70–1–2	15.3		Eng.	26.1
	Main	15.4		Yarn.	25.8
	Ad.	15.4		Arg. - -	26.6
				Ay. 71 -	26.9
283	Arm.	40 40 22.6		Main 71	25.8
	Pulc.	22.5		Ad.	26.5
	R. C.	22.5			
	Wu. -	21.0	337	Pulc.	41 24 57.4
	Ad.	22.2		R. C.	58.0
				Arm.	57.2
285	Arm.	31 7 57.2		Ay. 64	58.1
	Pulc.	56.2		Ad.	57.7
	Paris	57.1			
	Main	58.0	339	R. C.	54 29 2.7
	Ay. 71 -	57.4_2		Ay. 60	3.3
	Ad.	57.2		R. C_2	3.2
				Yarn.	4.8_2
290	Pulc.	53 32 4.3		Ad.	3.4
	Arm.	3.7			
	R. C_2	4.9	343	Arm.	37 3 30.6
	Yarn.	3.5		Yarn.	30.1
	Ay.	4.5		R. C_2	30.2
	Sm.	4.5		Ay. 64	29.8
	Ad.	4.2		Ad. -	30.1
297	Ay. 40	39 19 16.6	345	Arm. -	30 45 33.2_1
	R. C.	13.4		Pulc.	33.0
	Ja. -	14.8		Ay. 64	34.2
	Ad.	14.9		Main	32.4
				Ad.	33.2
310	Arm.	31 30 42.5	352	T. -	44 40 18.5
	Pulc.	43.2		Ay. 45	19.1
	Ay. 64	44.0		R. C.	18.4
	Main -	44.0		R. C_2	18.1
	Ay. 71–72 -	44.7		Ay. 64 -	18.0
	Main 71–72	44.2		Ad.	18.4
	Ad. -	43.8			
			357	H.	31 21 42.1
Gr. 241	T.	48 53 11.4		Main	42.1
	R. C. -	10.5		Sm.	42.2
	Ay. 60	11.2		Main 74	40.8
	Ad.	11.0		Ad.	41.8

No.	Authority.	Declination.
		° ′ ″
377	R. C.	42 16 48.2
	Ja.	47.0
	Ad.	47.6
390	T.	57 32 60.1
	Ay.	58.6
	R. C.	59.4
	Arm.	59.7
	Ad.	59.5
391	Ay. 40	57 34 26.4
	12-yr., 45	25.5
	R. C.	25.6
	Arm.	25.0
	6-yr.	26.1_2
	Paris	25.4
	Ad.	25.6
Gr. 294	R. C.	42 51 8.7
	Arm.	8.4
	Ad.	8.6
Gr. 297	R. C.	49 27 58.6
	Arm.	57.4
	Ad.	58.0
Pi. I, 50	T.	42 55 44.9
Gr. 299	R. C.	44.5
	Arm.	44.0
	Ad.	44.5
404	Arm.	44 52 22.4
	Ay. 60	23.4
	Ay. 64	23.0
	Yarn.	23.2_2
	Ay. 68–71	22.9_2
	Paris	23.0
	Ad.	23.0
409	Pulc.	37 3 42.2
	Arm.	41.9
	R. C_2	42.3
	Ay. 64	42.3
	Ad.	42.2
416	Pulc.	59 35 5.4
	Ay. 50	5.2
	R. C_2	3.7
	Oom.	4.6
	Yarn.	5.4_2
	Ad.	5.0
425	T.	42 48 31.7
	R. C.	30.1
	Pulc.	31.8
	Ay. 60	31.2
	Ad.	31.2
432	Arm.	44 45 37.5
	Ay.	38.3
	R. C.	37.5
	R. C_2	36.2
	Ad.	37.4
Gr. 317	R. C.	43 24 1.0
	Arm.	0.4
	Ad.	0.7
441	Arm.	46 21 41.8
	R. C.	41.1
	Ay. 64	41.8
	Ay. 68	42.0_2
	Ad.	41.7
456	Ay.	58 35 22.0
	R. C.	21.8
	Pulc.	22.6
	Arm.	22.6
	Ad.	22.3
465	C. A.	36 35 44.5
	T.	44.1
	Arm.	44.6
	Bonn.	43.9
	Ay. 64	44.1
	Ay. 72	44.1
	Ad.	44.2
474	Arm.	48 5 1.2
	R. C.	0.5
	Ay. 64–68	0.2_2
	LeV.	1.2
	Ad.	0.8
480	Arm.	40 46 47.3
	Ay. 45	46.5
	R. C.	46.1
	R. C_2	46.7_2
	Ay. 71	46.1_1
	Yarn.	47.9_2
	Ad.	46.7
482	R. C.	57 20 23.7
	Arm.	22.6
	Ay. 50	22.8
	Ja.	22.3
	Sm.	22.6
	Yarn.	24.3_2
	Ad.	22.7
487	St.	47 59 38.5
	R. C_2	38.0
	Arg.	38.8
	Eng.	37.6
	Leid.	38.6
	Ay. 69	38.4
	$Eng._2$	38.6
	Yarn.	38.6
	Main	39.0
	Ad.	38.4
492	Arm.	43 44 57.5
	R. C.	56.7
	Ay. 64	57.8
	Paris	57.3
	Ad.	57.3
Gr. 357	T.	53 13 60.0
	R C.	58.8
	Arm.	58.9
	Ad.	59.2
501	R. C.	42 39 52.9
	Ja.	53.3
	Pulc.	52.9
	Ad.	53.1
502	Arm.	39 56 35.1
	R. C_2	35.0
	Ay. 64	35.6_{17}
	Wu. 67	34.6
	Ay. 68	35.9
	Ay. 71	35.9
	Ad.	35.4
508	Ay. 40	57 59 41.7
	Arm.	40.3
	Pulc.	42.0
	Ad.	41.3

No.	Authority.	Declination.		
		°	′	″
510	C. A.	41	59	8.1
	R. C.			7.1
	Arm.			6.0_2
	R. $C._2$			7.2_1
	Ay. 69			7.2
	Leid.			7.5
	Eng.			7.7
	Ad.			7.3
509	T.	59	54	54.5
	Ay. 40			55.4
	R. C.			55.3
	Arm.			56.3
	R. $C._2$			55.5_1
	Ad.			55.4
516	C. A.	34	36	51.2
	Ja.			51.1
	Ay. 64			50.7
	Main			50.8
	Sm.			50.4
	Yarn.			51.0
	Main 70			50.9
	Ad.			50.7
515	Arm.	59	55	10.6
	R. C.			11.0
	R. $C._2$			10.5_1
	Ay. 71			11.5_1
	Ad.			10.9
522	St.	50	3	28.6
	R. $C._2$			2-.5
	Leid.			29.0
	Eng.			28.8
	Ay. 70			29.2
	Ad.			28.8
525	Arm.	56	54	25.6
	Bonn.			26.5_2
	Sm. 59			24.6
	Sm. 65			25.3
	Main			25.4
	Ad.			25.5
Gr. 374	R. C.	45	30	39.9
	Arm.			39.3
	Ad.			39.6
540	T.	45	36	20.1
	R.			20.1
	R. C.			20.8
	Arm.			20.5
	R. $C._2$			21.6
	LeV.			21.3
	Ad.			20.7
544	C. A.	37	19	48.4
	T.			46.2
	R.			45.9
	Arm.			45.5
	R. $C._2$			45.9
	Ay. 64			46.5
	Ay. 70			46.15_2
	Ad.			46.5
547	R. C.	47	16	23.9
	Arm.			23.6
	Ja.			25.5
	Yarn.			24.4
	Sm.			24.1
	Ad.			24.3

No.	Authority.	Declination.		
		°	′	″
555	Lal.	51	18	59.9
	Pi.			58.1
	Gr.			58.4
	Ay.			57.3
	R. C.			58.3
	Arm.			59.2
	R. $C._2$			57.5
	Q.			58.8
	Ad.			58.0
558	Ay. 40	54	31	38.6
	Arm.			39.4
	R. C.			37.6
	Pulc.			38.0_2
	Ad.			38.4
560	Arm.	50	10	25.9
	Pulc.			26.1
	Ou.			25.9
	Ay. 50			26.4
	Ad.			26.1
562	Arm.	50	51	21.3
	R. C.			23.1
	Ja.			22.7
	Yarn.			[19.9_2]
	Sm. 59			21.2
	Ay. 64			23.0
	Sm. 65			22.2
	Ad.			22.2
566	Arm.	40	6	42.3_2
	R. C.			42.2
	Ay. 64			43.2
	Wn. 67			42.7
	Ad.			42.6
Gr. 400	R. C.	40	2	24.6
	Arm.			23.6
	Ad.			24.1
575	Arm.	40	5	19.3
	Ja.			19.6
	Pulc.			19.4
	R. C.			19.7
	Ad.			19.5
576	Wn.	36	30	47.1
	Yarn.			48.5_2
	LeV.			47.9
	Main			48.4
	Ad.			47.9
579	Yarn.	36	39	50.2
	Arm.			49.8
	R. $C._2$			[48.3_1]
	Ay. 64			49.9
	Main			50 1
	Ay. 72			50.6_2
	Ad.			50.1
580	Arm.	36	38	15.3
	Yarn.			15.8
	R. $C._2$			15.0
	Ay. 64–72			15.4_8
	Main			15.9
	Ad.			15.5

No.	Authority.	Declination.	No.	Authority.	Declination.
		° ′ ″			° ′ ″
587	T.	46 29 3.1	624	Arm.	32 40 49.7
	R.	1.1		Pulc.	49.2
	R. C.	2.5		Ay. 64–72	50.3
	Arm.	3.5		Ad.	49.8
	Ad.	2.6			
			628	St.	41 43 43.8
				$R. C._2$	43.0
590	Arm.	48 35 30.7		Ay. 64	43.6
	Ay. 45	31.2		Wn.	43.0
	R. C.	30.1		Ay. 69	44.1
	Pulc.	30.3		Ay. 71	43.5
	Ad.	30.6		Main 72	42.1
				Ad.	43.5
614	Arm.	53 52 53.5	646	Arm.	57 49 38.6
	Ay. 40–5	55.0		Ay. 40	38.1
	R. C.	54.7		R. C.	38.4
	Pulc.	55.0		Pulc.	38.6
	Ad.	54.6		Ad.	38.4

DETAILS OF POSITIONS—DIVISION V.

NEW STARS CLASSED HIGHER THAN "C" NOT BEFORE GIVEN.

(SEE INTRODUCTION.)

Number.	Authority.	Right ascension.			Declination.			Remarks.
		h.	*m.*	*s.*	°	′	″	
Gr. 1888	R. C.	12	19	16.00	64	29	44.2	
	Arm.			. .			44.3	
	Yarn.			15.73_1			43.5_2	
	Ay. 73			15.83_2			43.3	
	Ad.			15.88			43.9	
XII, 198	T.	12	45	. .	19	50	28.2	
	Arm.			1.82			27.9	
	Kön.						27.1_1	
	Q. 64			. .			28.9_2	
	Main			1.44_2			27.8	
	Ad.			1.66			28.0	
XII, 202	P. M.	12	45	44.15	19	51	6.9	
	T						8.9_1	
	Q.			. .			8.0_2	
	Main			43.91_2			7.3_3	
	Arm.			43.94			.	
	Ad.			44.01			7.7	
12 Canum	Pulc.	12	50	10.656_{21}	38	59	38.0	
	Ay. 60			10.683			38.3	
	Ay. 64			10.722			38.2	
	Gyldén			. .			38.3	
	Arg.			10.674			38.2	
	Eng.			10.691			38.3	
	Paris			10.625			38.4	
	Wn. 70			10.708			37.6	
	Leiden			. .			38.1	
	Ay. 70			10.724			37.9	
	Ad.			10.69			38.1	
XII, 253	T.	12	57		24	29	54.1	
	Arm.			. .			55.8	
	Ay. 72			6.17			54.7	
	Ad.			6.17			54.6	
XIII, 134	T.	13	29	17	23	8	9.6	The star has a considerable P. M. in A. R., which I have not determined.
	Pulc.						8.3	
	Arm.						9.8	
	Q.			.			9.0	
	Ad.		29	17			9.3	
η Ursæ	Pulc.	13	42	36.801	49	56	16.4	
	Ay. 60			36.869			15.9	
	Ay. 64			36.804			15.7	
	Gyldén			. .			16.3	
	Arg.			36.748			16.2	
	Eng.			36.827			16.0	
	Paris			. .			16.4	
	Wn. 70			36.854			15.9	
	Leiden			. .			16.1	
	Ay. 70			36.770			16.0	
	Ad.			36.81			16.1	
XIII, 225	T.	13	46		12	47	2.9	
	Pulc.			. .			1.9	
	H.			10.88			2.3	
	Arm.						1.8	
	Kön. 63						2.2_2	
	Q. 63			. .			1.1_1	
	Ad.			10.88			2.1	
XIII, 303	T.	14	0		17	34	1.6	Catalogue has 1″.2.
	Pulc.			.			1.4	
	Arm.			32.08			1.0	
	Q. 66			. .			1.2	
	Ad.			32.08			1 3	
Gr. 2105	P. M.	14	17	27.77	68	21	17.5	
	R. C.			27.73			16.1	
	Arm.						18.2	
	Q.			. .			15.9_2	
	Ay. 73–74			27.52			16.5	
	Ad.			27.69			17.1	

Number.	Authority.	Right ascension.	Declination.	Remarks.
		h. *m.* *s.*	° ′ ″	
θ Bootis	Pulc.	14 20 56.490	52 25 45.2	
	Ay. 64	56.490	45.5	
	Arg.	56.448	46.2	
	Eng.	56.548	45.0	
	Wn. 70	56.528	44.8	
	Leiden	.	44.8	
	Ay. 70	56.431	44.4	
	Ad.	56.49	45.1	
XIV, 126	St.	14 28 19.158	60 46 34.3	I have considered it best to adopt the decl. of Pulc., without any P. M.
	T.		36.1	
	H. 44		35.4	
	Rü.		34.6	
	Arm.		[33.8]	
	R. C.	. .	37.4	
	Pulc.	19.14	36.8	
	Ad.	19.16	36.8	
XIV, 140	T.	14 32 . .	18 50 35.2	
	Arm.	25.40	34.7	
	Pulc.	. .	33.6	
	Rü.	25.30	34.4	
	Q.	. .	33.7	
	Ay. 64	25.30	34.4	
	Ad.	25.33	34.3	
XIV, 247	T.	14 55 .	22 32 30.4	
	Rü.		30.5_1	
	Arm.	.	30.2_1	
	Kön.		31.3_2	
	Q.	. .	30.2_1	
	Main 67	16.16_4	30.2	
	Main 69	16.24_1	. .	
	Ad.	16.18	30.5	
β Bootis	Pulc.	14 57 14.273	40 53 4.5	
	Ay. 60	14.258	4.6	
	Ay. 64	14.266	4.1	
	Paris	14.205	5.0	
	Wn. 70	14.193	.	
	Leiden	. .	4.8	
	Ay. 70	14.231	5.3	
	Ad.	14.24	4.7	
XIV, 281	T.	15 1 .	18 55 35.6	
	Pulc.	. .	36.7	
	Arm.	36.52	36.0	
	Kön.		35.4_2	
	Q. 66	.	33.6_1	
	Ad.	36.52	35.6	
125 Heis Bootis	Pulc.	15 6 . .	19 26 51.4	
	H.	23.05	50.9	
	Ay. 64	23.01	51.7	
	Ad.	23.03	51.3	
μ Bootis	Pulc.	15 19 46.091	37 48 59.5	
	Ay. 64	46.087	59.7	
	Wn. 70	46.174	59.8	
	Ay. 72	46.098	60.1	
	Ad.	46.11	59.8	
Gr. 2234	Arg.	15 21 50.965	60 58 59.7	
	Q. 66	. .	60.2_1	
	Ad.	50.96	59.8	
XV, 83	T.	15 22	25 32 15.7	
	Rü.		17.0_2	
	Q.	. .	16.4_2	
	Main	16.35	16.8	
	Ad.	16.35	16.4	

Number.	Authority.	Right ascension.			Declination.			Remarks.
		h.	*m.*	*s.*	°	′	″	
Gr. 2278	Gr.	15	43	. .	59	42	5.2	
	R. C.			19.31			6.4	
	Oom.			. .			5.4	
	Ad.			19.31			5.6	
τ Herculis	Pulc.	16	15	59.009	46	36	43.2	
	Ay. 60			59.015			43.2	
	Ay. 64			58.873			43.3	
	Wn. 70			59.123			42.9	
	Ay. 70			59.053			42.3	
	Ad.			59.02			43.1	
η Herculis	Pulc.	16	38	36.713	39	9	40.0	
	Ay. 64			36.685_{13}			39.9	
	Wn. 70			36.709_{18}			40.0	
	Ay. 72			36.662_{5}			40.2	
	Ad.			36.69			40.0	
d Herculis	Mädl.	16	56	59.646	33	45	2.9	
	Gould			59.423			2.9	
	Ay. 60			59.606			2.7	
	Ay. 64			59.552			1.5	
	Yarn.			59.443_{2}			0.9	
	Wn. 70			59.505_{15}			2.2	
	Wn. 72			59.46_{3}			1.6	
	Ad.			59.54			1.9	
93 Heis Herculis	Rü.	17	1	.	22	15	18.9_{1}	
	Pulc.			. .			18.8	
	H.			1.01			18.5	
	Kön. 64			. .			18.2_{1}	
	Main 69			0.84			19.2	
	Ad.			0.84			18.6	
F. 2895	Arg.	17	25	23.40	67	24	41.3	
	Ad.			23.40			41.3	
β Draconis	Pulc.	17	27	36.493	52	23	41.4	
	Ay. 60			36.579			40.4	
	Ay. 64			36.498			40.5	
	Arg.			36.543			41.3	
	Eng.			36.643			40.3	
	Paris			36.445			41.7	
	Leiden			. .			40.7	
	Ay. 70			36.494			40.9	
	Ad.			36.53			40.9	
γ Draconis	Pulc.	17	53	42.306	51	30	15.5	
	Ay. 60			42.243			15.2	
	Ay. 64			42.280			15.2	
	Gyldén			. .			15.5	
	Arg.			42.268			16.8	
	Eng.			42.261			15.5	
	Paris			42.176			16.0	
	Wn. 70			42.339			15.1	
	Leiden			. .			15.7	
	Ay. 70			42.175			15.5	
	Ad.			42.26			15.6	
a Lyræ	Pulc.	18	32	42.395	38	40	6.9	
	Ay. 60			42.386			6.3	
	Ay. 64			42.362			6.4	
	Gyldén			. .			6.8	
	Paris			42.300			7.3	
	Wn. 70			42.419			6.3	
	Leiden			. .			6.2	
	Ay. 70			42.331			6.5	
	Ad.			42.37			6.6	
XVIII, 173	T.	18	35	49.00	65	22	36.5	
	H.			49.49			35.8	
	R. C.			49.64			36.1	
	Pulc.			49.56			36.7	
	Ad.			49.56			36.4	

Number.	Authority.	Right ascension.			Declination.			Remarks.
		h.	*m.*	*s.*	°	′	″	
β Lyræ	Pulc.	18	45	27.827	33	13	7.8	
	Ay. 60			27.879			8.2	
	Ay. 64			27.864			8.1	
	Paris			27.822			8.4	
	Arg.			27.883			7.5	
	Eng.			27.856			8.1	
	Wn. 70			27.930			7.6	
	Leiden			. .			7.5	
	Ay. 70			27.871			7.5	
	Ad.			27.87			7.9	
Gr. 2923	Gr.	19	37	. .	59	32	55.0	Gr. corrected by $-30''$, according to Argelander.
	R. C.			51.58			55.2	
	Oom.			. .			55.3	
	Ad.			51.58			55.2	
XIX, 320	P. M.	19	47	52.51	20	0	50.2	
	T.			. .			49.5	
	Arm.			52.49			51.0	
	Main			52.74			51.9	
	Q			. .			49.02_2	
	Ad.			52.58			50.4	
Gr. 3019	R. C.	19	56	54.60	63	11	36.2	P. M. $-0''.025$, Gr.
	Arm.			54.86			35.2	
	Ay. 72			54.91_1			35.5	
	Ad.			54.77			35.6	
R. C. 4639	P. M.	20	6	57.67	61	42	28.8	P. M. $-0''.06$, which agrees with T.
	Ay. 40			. .			28.3	
	R. C.			57.91			28.6	
	Ay. 73			57.67			29.0	
	Ad.			57.75			28.7	
40 Heis Vulp.	Pulc.	20	20	. .	21	0	13.1_4	
	H. 44			8.70			13.8_2	
	Rü.			. .			12.9_1	
	Main			8.82_1			12.4_4	
	Ad.			8.74			13.0	
α Cygni	Pulc.	20	37	10.246	44	50	4.6	
	Ay. 60			10.242			4.3	
	Ay. 64			10.241			4.1	
	Gyldén			. .			4.6	
	Arg.			10.321			5.0	
	Eng.			10.244			3.8	
	Paris			10.241			5.0	
	Wn. 70			10.285			3.9	
	Leiden			.			4.2	
	Ay. 70			10.231			4.5	
	Ad.			10.26			4.4	
XX, 283	T.	20	37	28.56	35	0	32.1	
	H.			28.49			33.2	
	Pulc.			. .			33.7	
	Yarn.			28.39			33.9	
	Wn. 72			28.59			33.4	
	Ad.			28.51			33.4	
T Cygni	Yarn.	20	42	11.24	33	54	56.5	
	Bonn.			11.44			57.7	
	Wn. 72			11.44			56.7	
	Ad.			11.37			57.0	
Aö. 21126	Eng.	20	43	42.46	47	22	18.5	
	Ad.			42.46			18.5	
XX, 400	T.	20	50	40.15	58	50	1.1	
	Aö.						2.8_2	
	Oom.			.			0.8_3	
	Ad.			40.15			0.7	

Number.	Authority.	Right ascension.			Declination.			Remarks.
		h.	*m.*	*s.*	°	′	″	
ν Cygni	Pulc.	20	52	30.860	40	41	12.7	
	Ay. 60–64			30.794			12.3	
	Wn. 70			30.875			12.2	
	Ad.			30.84			12.4	
61 Cygni	Pulc.	21	1	17.632	38	8	8.6	
	Ay. 60			17.635			8.9	
	Ay. 64			17.665			8.3	
	Arg.			17.658			9.3	
	Eng.			17.701			9.0	
	Paris			17.601			9.3	
	Wn. 70			17.696			8.6	
	Leiden			. .			8.6	
	Ay. 70			17.678			8.7	
	Ad.			17.67			8.8	
XXI, 1	P. M.	21	3	20.59	29	42	4.4	P. M. $-0''.04$; c. — o.: (Pi.) $-1''.1$.
	T.						3.4	
	Rü.			. .			4.2	
	Arm.			20.62			4.0	
	Pulc. 42						3.1	
	R. C_2						5.6	
	Q. 62						4.2	
	Kön. 61			. .			[5.9_1]	
	Main 70			20.71			6.4	
	Ay. 71			20.74			4.6	
	Ad.			20.73			4.5	
11 Heis Pegasi	Pulc.	21	25	6.77	11	35	21.1	
	H.			6.68			21.6	
	Bonn.			6.92			22.3	
	Kön.			6.73_2			22.9	
	Ad.			6.78			22.0	
Arg. 224	Arg.	21	53	8.95	29	13	45.7	
	Ad.			8.95			45.7	
Arg. 228	Arg.	22	11	0.35	12	16	18.1	
	Ad.			0.35			18.1	
XXII, 65	P. M.	22	13	27.20	37	8	31.6	
	T.						31.2	
	Kön.			. .			31.5	
	Yarn.			27.42			32.5	
	Main			27.35_1			32.1	
	Ad.			27.32			31.8	
Arg. 233	Arg.	22	36	37.47	65	51	24.9	
	Ad.			37.47			24.9	
Arg. 234 = Pi. XXII, 214	Arg.	22	39	44.78	29	47	52.4	
	Ad.			44.78			52.4	
Gr. 4149	R. C.	23	44	18.89	63	2	55.6	
	Bonn.			18.86			55.5	
	Yarn.			18.75			54.4_2	
	Ad.			18.83			55.3	
O., 103	P. M.	0	26	13.65	27	35	22.0	P. M. from Piazzi $-0''.02$.
	T.			. .			21.9	
	Arm.			13.67			21.8	
	Q. 66						23.1	
	Ay. 72			. .			22.2	
	Ad.			13.66			22.1	

Number.	Authority.	Right ascension.	Declination.	Remarks.
		h. *m.* *s.*	° ′ ″	
α Cassiopeæ	Pulc.	0 33 25.435	55 51 5.2	
	Ay. 60	25.461	5.3	
	Ay. 64	25.383	5.3	
	Gyldén	. .	5.5	
	Arg.	25.480	5.4	
	Eug.	25.562	4.3	
	Paris	25.461	5.7	
	Wu. 70	25.484	5.2	
	Leiden	.	5.0	
	Ay. 70	25.405	5.4	
	Ad.	25.46	5.2	
O., 253	T.	0 53	20 34 31.0	P. M. from Piazzi + 0″.03.
	Q.	. .	30.9_1	
	Main	48.03	30.6	
	Ad.	48.03	30.8	
O., 258	T.	0 54 .	24 37 8.8	
	Q.	. .	7.7_2	
	Arm.	58.39	. .	
	Main	58.52	9.4	
	Ad.	58.46	8.7	
Arg. 13	Arg.	1 2 25.88	67 6 43.5	
	Ad.	25.88	43.5	
I., 7	T.	1 4	22 3 27.5	
	Main 68	. .	26.8	
	Main 72	55.99	26.6	
	Ad.	55.99	27.0	
Arg. 15	Arg.	1 25 34.15	68 18 3.9	
	Ad.	34.15	3.9	
Arg. 20	Arg.	1 32 20.42	66 17 2.8	
	Ad.	20.42	2.8	

DETAILS OF POSITIONS—DIVISION VI.

NEW STARS IN CLASS "C"

NOT IN

THE BRITISH ASSOCIATION CATALOGUE.

Number.	Authority.	Right ascension.	Declination.	Remarks.
		h. *m.* *s.*	° ′ ″	
10 Heis Comæ	Pulc.	12 11 13	29 37 48.6	Later observations indicate an increase of declination by about 2″, with P. M. of about + 0″.06.
	H.		49.7	
	Ad.		49.2	
Rü. 3894	Rü.	12 11 23	15 50 28.3	
	Bonn.		27.2	
	Ad.		27.7	
Rü. 3921	Rü.	12 14 29	16 14 5.9_2	
	Bonn.		6.9_2	
	Kön.		6.0_1	
	Ad.		6.3	
Pi. XII, 57	T.	12 15 54	25 28 3.1	
	Arm.		[27 59.8]	
	H.		28 4.7	
	Pulc.		3.9	
	Kön.		5.5_1	
	Q.		3.5_2	
	Ad.		4.2	
Pi. XII, 148	T.	12 32 50	23 20 52.4	
	Pulc.		51.7	
	Arm.		50.0	
	Kön.		49.8_1	
	Ad.		51.0	
19 Heis Canum	H.	12 33 12	36 38 22.7	
	Yarn.		21.7_2	
	Pulc.		22.6	
	Ad.		22.4	
XII, 166	T.	12 36 57	10 47 17.1	P. M. — 0″.04 (L. Pi.).
	Rü.		15.4_1	
	Arm.		16.4	
	Q.		16.3	
	Ad.		16.4	
Gr. 1918	Rü	12 37 35	61 50 20.8	
	R. C.		21.9	
	Ay.		23.1	
	Ad.		22.0	
R. C. 2904	Rü.	12 38 4	59 33 20.2	
	R. C.		20.7	
	Oom.		19.7	
	Ad.		20.1	
XII, 188	T.	12 42 33	12 47 1.8	P. M. — 0″.13 (L. Pi.).
	Rü.		0.0_1	
	Arm.		46 59.5_2	
	Q. 64		47 0.3	
	Ad.		0.5	
Gr. 1943	R. C.	12 51 58	69 17 37 7	
	Ay. 45		38.3	
	Ad.		38.0	
Gr. 1946	R. C.	12 53 32	69 22 54.8	
	Kon.		55.5	
	Q.		53.8	
	Ad.		54.9	
39 Heis Canum	Yarn.	12 54 27	32 27 15.0_2	
	Kön.		16.0_1	
	Ad.		15.3	
Pi. XII, 268	T.	13 0 13	29 41 58.1	
	Arm.		58.4	
	Q.		56.5_2	
	Ad.		57.8	

Number.	Authority.	Right ascension.	Declination.	Remarks.
		h. *m.* *s.*	° ′ ″	
XIII, 12	T.	13 5 0	62 53 42.3	P. M. —0″.05; c.—o.: L.—1″.7; Pi.+0″.6; Gr.—0″.6. F. is 15″ too far south.
	R. C.		41.6	
	Arm.		43.6	
	Q.		41.2_1	
	Ad.		42.4	
XIII, 18	T.	13 6 30	19 24 57.1_2	
	H.		57.9	
	Arm.		57.5	
	Q.		56.8_2	
	Ad.		57.4	
XIII, 36	T.	13 10 29	20 26 39.9	
	H.		41.2	
	Pulc.		41.7_2	
	Arm.		39.9	
	Ad.		40.7	
XIII, 77	T.	13 19 9	24 30 24.1	
	Arm.		24.0	
	Pulc.		23.7	
	Q.		[21.0_1]	
	Ad.		23.8	
XIII, 113	P. M.	13 24 15	60 34 27.1	
	T.		[32.0]	
	Arm.		27.3	
	R. C.		25.6	
	Ad.		26.7	
XIII, 120	T.	13 26 30	15 2 13.1	
	Arm.		13.3	
	Schj.		13.7	
	Q. 66		12.6	
	Ad.		13.2	
XIII, 131	T.	13 28 53	13 9 18.2	
	Arm.		16.8	
	Ad.		17.5	
XIII, 155	T.	13 33 1	18 54 6.4	
	Rü.		5.0_1	
	Arm.		8.3	
	Kön.		7.7_2	
	Ad.		7.0	
XIII, 163	T.	13 34 53	28 41 54.2	
	H. 44		53.9	
	Pulc.		54.4_2	
	Arm.		53.6	
	Ad.		54.0	
XIII, 167	T.	13 36 28	15 46 46.7	
	Arm.		45.5	
	Kön.		46.3_1	
	Q.		43.9_1	
	Ad.		45.8	
XIII, 211	T.	13 43 31	13 37 [60.7]	
	Arm.		54.1	
	Kön. 61		53.9_1	
	Kön. 64		55.7_1	
	Ad.		54.4	
XIII, 214	T.	13 43 47	13 48 47.0_2	
	Arm.		47.4	
	Ad.		47.2	
XIII, 220	T.	13 44 30	21 53 48.7	
	Arm.		48.6	
	Ad.		48.6	

Number.	Authority.	Right ascension.	Declination.	Remarks.
		h. *m.* *s.*	° ′ ″	
Gr. 2055	R. C.	13 45 41	62 6 47.9	
	Arm.		49.3	
	H.		48.7	
	Ay. 72		48.0_2	
	Ad.		48.4	
XIII, 247	T.	13 49 49	14 40 10.0	
	Rü.		11.5	
	Arm.		10.5	
	Ad.		10.7	
XIII, 255	T.	13 51 13	21 33 56.6	Pi. gives 58″.6.
	Q.		60.2_2	
	Ad.		58.4	
XIII, 273	T.	13 52 59	65 58 16.4	P. M. — 0″.28; c. — o.: F. 1″.6; Pi. + 0″.2. The epoch of Piazzi is 1797.7.
	Arm.		17.1	
	Q.		16.5_1	
	Ad.		16.7	
XIII, 279	T.	13 55 16	14 20 11.3	
	Rü.		12.6	
	Q.		12.9	
	Ad.		12.2	
XIII, 280	T.	13 55 40	17 21 42.2	
	Arm.		41.6	
	Q. 66		41.6_1	
	Ad.		41.9	
XIII, 281	T.	13 55 40	18 16 37.0	
	Arm.		38.6	
	Ad.		37.8	
XIII, 285	T.	13 55 41	64 59 [35.3]	
	Rü.		27.6_2	
	A. Oe.		26.0_2	
	Arm.		27.8	
	Ad.		27.3	
XIII, 309	T.	14 1 20	29 2 4.7	
	Arm.		4.6	
	Q. 67		4.7	
	Ad.		4.6	
XIV, 1	T.	14 3 37	16 12 58.7	P. M. — 0″.05 (Pi.).
	Kön.		58.6_2	
	Q.		58.3_2	
	Ad.		58.5	
XIV, 20	T.	14 7 45	12 35 4.8	
	Arm.		6.8_1	
	Q. 63		4.3	
	Ad.		5.0	
XIV, 26	T.	14 8 53	22 27 27.1	c. — o.: Pi. — 9″.3.
	Arm.		27.0	
	Kön.		29.2_2	
	Q.		28.6_2	
	Ad.		27.8	
Gr. 2107	R. C.	14 19 1	61 32 12.4	P. M. — 0″.10; c. — o.: F. + 3″.5; Gr. — 0″.9. Declination doubtful.
	Rü.		13.5	
	Q.		14.8_1	
	Ad.		13.4	
XIV, 97	T.	14 23 10	26 24 48.9	
	Rü.		50.1	
	Arm.		51.1	
	Kön.		53.0_1	
	Q.		49.2_2	
	Ad.		50.2	

Number.	Authority.	Right ascension.	Declination.	Remarks.
		h. *m.* *s.*	° ′ ″	
Gr. 2129	R. C.	14 28 47	68 38 1.0	P. M. — 0″.05, Gr. The star should have been classified B.
	Main		0.9	
	Ad.		1.0	
XIV, 119	T.	14 29 2	13 38 46.0	
	Arm.		45.5	
	Ad.		45.8	
XIV, 160	T.	14 36 12	21 39 [42.9]	Pi. 39″.7. Later observations (Main) give 38″.6, and the place is at least of Class B.
	Kön.		39.3$_1$	
	Main		38.5	
	Ad.		38.8	
XIV, 178	T.	14 40 13	15 39 29.9	P. M. + 0″.05, Pi.
	Rü.		30.6$_2$	
	Pulc.		29.8	
	H.		32.4	
	Arm.		31.2	
	Ad.		30.8	
Str. 1884	P. M.	14 42 51	24 53 11.8	
	H.		11.8	
	Pulc.		12.3	
	Ad.		12.1	
D. M. 16°.2705	Bonn.	14 47 32	16 13 0.1$_2$	Main's observations are rather discrepant; later ones, however, agree, and the star may be classed B.
	Main 70		12 59.1	
	Ad.		12 59.5	
XIV, 231	T.	14 52 22	14 32 21.1	
	Rü.		21.8$_1$	
	Arm.		21.8	
	Q. 66		21.7$_1$	
	Ad.		21.5	
122 Heis Bootis	Pulc.	15 1 41	36 56 15.3	
	Yarn.		15.1$_2$	
	Ad.		15.2	
XV, 18	T.	15 8 0	23 26 [60.5]	P. M. + 0″.11 from Pi.
	Pulc.		55.9	
	Rü.		55.1	
	H.		55.6	
	Arm.		56.2	
	Kön.		55.9$_2$	
	Ad.		55.6	
F. 2626	F.	15 15 22	59 14 55.8	
	Oom.		52.8	
	Ad.		52.8	
XV, 53	T.	15 15 43	25 24 38.3	
	Arm.		37.7	
	Pulc.		37.1	
	Q. 62		36.5$_1$	
	Ad.		37.5	
F. 2628	F.	15 15 49	58 57 30.1	
	Oom.		22.9$_3$	
	Ad.		22.9	
XV, 72	T.	15 20 16	19 55 16.8	P. M. + 0″.03 (Pi.).
	Arm.		17.0	
	Pulc. 43		17.7	
	Kön. 63		18.0	
	Ad.		17.4	
R. C. 3387	R. C.	15 22 8	44 26 35.9	P. M. — 0″.07, L. B.
	Yarn.		35.9	
	Ad.		35.9	

Number.	Authority.	Right ascension.			Declination.			Remarks.
		h.	*m.*	*s.*	°	′	″	
XV, 89	T.	15	23	27	16	49	34.5	P. M. + 0″.08, Pi.
	Arm.						33.6	
	Pulc.						34.6	
	Rü.						35.7_1	
	Kön.						37.3_1	
	Q.						33.0_1	
	Ad.						34.5	
Gr. 2240	R. C.	15	25	43	55	37	24.5	
	Yarn.						25.9_2	
	Ad.						25.1	
XV, 119	T.	15	27	9	62	31	40.1	
	A. Ö.						39.8_3	
	R. C.						40.7	
	Arm.						39.9	
	Ad.						40.1	
XV, 142	T.	15	32	55	24	55	55.3	P. M. — 0″.05; c. — o.: L. — 2′.8₂; Pi. + 1″.1.
	Pulc.						57.6	
	H.						56.0	
	Arm.						57.2	
	Ad.						56.6	
R. C. 3431	R. C.	15	35	14	43	6	8.1_2	
	Yarn.						5.3_3	
	Ad.						6.5	
XV, 168	T.	15	37	14	66	11	49.7	P. M. — 0″.11; c. — o.: Pi. — 1″.1.
	Arm.						49.8	
	Yarn.						51.5_2	
	Q.						51.6_2	
	Ad.						50.7	
D. M. 58°.1591	Bonn.	15	42	6	58	49	23.0_1	
	Oom.						20.8	
	Ad.						21.5	
XV, 176	T.	15	42	24	14	10	43.7	P. M. — 0″.10, Pi.; c. — o.: L. — 0″.4; Pi. + 0″.3.
	Arm.						43.6	
	Q. 65						43.2_2	
	Ad.						43.5	
XV, 179	T.	15	42	58	13	6	30.0	
	Arm.						30.8	
	Q. 65						29.0_1	
	Ad.						30.1	
XV, 183	T.	15	43	42	12	56	26.8	P. M. + 0″.03; c. — o.: L. + 1″.4; Pi. + 0″.3.
	Arm.						26.9	
	Schj.						26.0_2	
	Q.						25.6_1	
	Ad.						26.2	
R. C. 3462	R. C.	15	46	43	42	56	27.9	
	Yarn.						27.1	
	Ad.						27.5	
XV, 206	T.	15	47	52	16	26	53.9	
	Arm.						53.9_2	
	Q.						52.9_1	
	Main						53.9_2	
	Ad.						53.7	
XV, 215	T.	15	50	4	18	59	15.4	
	Pulc.						16.6	
	Arm.						17.2	
	Ad.						16.2	
D. M. 59°.1698	Bonn.	16	1	22	59	25	53.0	
	Oom.						52.4	
	Ad.						52.6	

Number.	Authority.	Right ascension.	Declination.	Remarks.
		h. *m.* *s.*	° ′ ″	
Gr. 2309	R. C.	16 2 40	60 22 59.3	
	Q.		58.3_2	
	Ad.		58.9	
Gr. 2326	A. Ö.	16 11 58	67 27 43.4_1	
	H. 44		42.0	
	R. C.		41.2	
	Ad.		42.1	
XVI, 146	T.	16 31 22	63 6 [57.2]	Piazzi gives 51″.3.
	A. Ö.		49.7_2	
	Arm.		50.8	
	Q.		51.2_1	
	Ad.		50.6	
XVI, 161	T.	16 35 8	49 6 34.7	P. M. — 0″.08; c. — o.: Pi. + 1″.2.
	R. C.		35.8	
	Ou.		34.8	
	Yarn.		33.4	
	Ad.		34.6	
A. Ö. 16481	T.	16 39 43	62 32 [50.4_2]	Doubtful.
	Rü.		41.5_1	
	Yarn.		42.5	
	Ad.		42.1	
Rü. 5552	Rü.	16 42 23	13 48 51.9_{20}	
	Yarn.		49.6_2	
	Ad.		51.1	
D. M. 13°.3228	Bonn.	16 43 13	13 6 9.1	
	Schj.		8.9	
	Ad.		9.0	
XVI, 240	T.	16 49 30	13 49 25.2	Declination rather uncertain.
	Rü.		24.8	
	Arm.		26.2	
	Ad.		25.4	
75 Heis Herculis	Pulc.	16 49 32	21 9 40.5	
	H.		41.2	
	Ad.		40.9	
84 Heis Herculis	Pulc.	16 55 42	22 49 5.6	
	H.		6.6	
	Ad.		5.8	
XVI, 292	T.	16 59 15	19 46 26.1	
	Rü.		25.0	
	H.		24.6	
	Pulc.		24.5	
	Q.		24.2_1	
	Kön.		24.0_1	
	Ad.		24.9	
XVI, 298	T.	17 0 18	10 37 28.0_3	
	Q. 64		26.4_1	
	Ad.		27.4	
A. Ö. 16829	Åbo. Dorpat	17 3 20	56 18 0.8	Data from Struve's Arc du Méridien.
	Pulc.		0.8	
	Ad.		0.8	
XVII, 7	T.	17 4 54	26 36 46.6	
	Kön. 62		49.5	
	Q.		48.0_2	
	Ad.		47.7	
XVII, 30	T.	17 6 40	61 18 55.5_2	P. M. + 0″.05, Arg. LIX.
	A. Ö.		56.8_1	
	R. C.		57.0	
	Arm.		56.6	
	Bonn.		57.0_2	
	Ad.		56.6	

Number.	Authority.	Right ascension.	Declination.	Remarks.
		h. *m.* *s.*	° ′ ″	
XVII, 37	T.	17 10 29	23 53 0.4	
	Q.		52 59.7_2	
	Ad.		53 0.1	
XVII, 64	T.	17 13 54	28 57 16.4	P. M. — 0″.03 (Pi.).
	H.		17.8	
	Pulc.		17.3	
	Arm.		[20.4]	
	Kön.		16.5	
	Q.		17.7_2	
	Ad.		17.0	
Gr. 2432	Pos. Med.	17 14 34	60 50 50.7_1	P. M. + 0″.04 Gr.
	R. C.		51.5	
	Arm.		51.2	Including later observations we find the declination 50″.7 and P. M. + 0″.027 : Class B.
	Ay. 73		50.9	
	Ad.		51.2	
Gr. 2433	R. C.	17 14 59	60 48 12.5	P. M. — 0″.03 (Gr.).
	Arm.		11.6	
	Ay. 73		12.4	
	Ad.		11.8	
XVII, 71	T.	17 15 4	25 39 58.0	
	Pulc.		58.7	
	Rü.		[55.8_1]	
	H.		58.6	
	Ad.		58.3	
XVII, 78	T.	17 16 33	10 19 2.8	
	Q.		3.7	
	Ad.		3.2	
XVII, 94	P. M.	17 18 55	15 43 16.7	Pi., 15″.6.
	T.		15.9	
	Pulc.		16.0	
	H.		16.1	
	Kön.		15.2_1	
	Ad.		16.0	
XVII, 95	T.	17 18 55	16 25 5.5	
	H.		3.8	
	Arm.		6.7_1	
	Kön.		3.7_1	
	Q. 65		3.1_1	
	Ad.		4.6	
XVII, 104	T.	17 20 6	16 29 41.8	
	Q.		42.1_2	
	Ad.		41.9	
61 Heis Ophiuchi	H.	17 28 4	16 24 29.1	A P. M. of — 0″.06 is quite probable, and a correction of — 1″.8 to the declination.
	Pulc.		29.0	
	Ad.		29.1	
XVII, 163	P. M.	17 30 39	21 4 40.0	Pi., 38″.5.
	T.		[34.6]	
	H.		39.1	
	Pulc. 41–45		41.5_2	
	Q. 63		39.3_2	
	Kön. 64		38.6_1	
	Ad.		39.4	
XVII, 183	T.	17 33 13	13 23 60.5	
	Rü.		58.8^1	
	Q. 63		60.2^1	
	Schj.		59.8^2	
	Ad.		59.9	
XVII, 220	T.	17 34 58	68 11 47.1_1	
	A. Ö.		49.5_1	
	Q.		48.1	
	Ad.		48.5	

Number.	Authority.	Right ascension.	Declination.	Remarks.
		h. *m.* *s.*	° ′ ″	
XVII, 237	T.	17 37 9	68 33 [31.0]	P. M. — 0″.07 (Pi.).
	R. C.		33.6	
	Arm.		34.4	
	Q.		34.6	
	Ad.		34.0	
Aö. 17420 = R. C. 3745	R. C.	17 37 18	68 26 57.6	
	W.		58.7_2	
	Ad.		58.1	
154 Heis, Herculis	Pulc.	17 41 37	17 44 41.5	
	Rü.		[44.7]	
	H.		40.9	
	Ad.		41.2	
159 Heis Herculis	Rü.	17 43 3	20 36 32.1_1	Well-determined for 1860, P. M. Doubtful.
	Bonn.		32.0_{16}	
	Main.		31.1	
	Ad.		31.7	
Rü. 6047	Rü.	17 44 13	20 40 40.4_3	
	H.		39.1	
	Ad.		39.6	
166 Heis Herculis	Pulc.	17 45 32	29 21 24.2	
	H.		24.3	
	Rü.		25.5	
	Ad.		24.6	
172 Heis Herculis	Pulc.	17 50 36	22 29 5.6	
	H.		5.0	
	Ad.		5.3	
XVII, 301	T.	17 51 7	18 37 52.4	P. M. + 0″.03 (Pi.).
	Kön.		51.4_3	
	Q.		51.0_2	
	Ad.		51.6	
XVII, 381	T.	18 2 3	13 3 20.0_1	
	Q. 65		21.5_2	
	Ad.		20.9	
XVIII, 23	Schw.	18 5 18	66 55 44.7_1	Ay. 74 (since added) gives 44″.6; hence the star is classed B in the catalogue.
	T.		43.4	
	Arm.		45.5	
	Ay. 71		44.1_1	
	Ad.		44.5	
XVIII, 31	T.	18 8 43	61 51 1.3_3	Very doubtful. Pi. 2″.5; A. Ö. 4″.7 (1).
	Arm.		5.3_3	
	Ad.		3.5	
Gr. 2529	R. C.	18 8 44	41 6 58.2	P. M. — 0″.05, L. G.
	Kön.		57.0	
	Ad.		57.5	
204 Heis Herculis	Rü.	18 12 38	18 5 3.7	
	Pulc.		6.8	
	H.		5.3	
	Kön.		4.8	
	Ad.		5.1	
D. M. 64°.1253	A. Ö.	18 13 42	64 42 34.9	
	Bonn.		33.9	
	Ad.		33.9	
8 Heis Lyræ	L.	18 21 10	29 45 34.8	
	Pulc.		30.7_2	
	H. 44		30.7_1	
	Bonn.		31.9_1	
	Ad.		31.0	

Number.	Authority.	Right ascension.	Declination.	Remarks.
		h. *m.* *s.*	° ′ ″	
XVIII, 83	T.	18 21 27	26 23 19.2	
	H.		18.6_2	
	Arm.		19.2	
	Ad.		19.1	
XVIII, 84	T.	18 21 39	26 22 35.1	P. M. + 0″.04, Pi.
	Pulc.		36.9	
	H.		35.4	
	Arm.		37.5	
	Ad.		36.4	
217 Heis Herculis	Pulc.	18 29 42	18 6 18.5	
	H.		16.7	
	Ad.		17.6	
XVIII, 133	T.	18 31 22	11 19 4.7_1	
	Arm.		6.1_1	
	Q.		5.7	
	Ad.		5.5	
A. Ö. 18414	12-yr.	18 31 37	51 41 0.9	
	Ou.		0.1	
	Ad.		0.5	
XVIII, 156	T.	18 36 1	12 8 15.8	
	Arm.		17.5_2	
	Ad.		16.5	
XVIII, 174	T.	18 36 26	62 24 45.3	Pi., 46″.8; Gr., 45″.1; hence no P. M.
	H. 44		46.0	
	R. C.		45.9	
	Arm.		[56.6_1]	
	Ad.		45.5	
P. M. 2162	P. M.	18 42 32	10 37 22.0	Proper motion — 0″.48.
	Sabler		23.1	
	Q.		23.3	
	Ad.		22.8	
XVIII, 212	T.	18 43 4	61 48 25.0_2	
	A. Ö.		26.6_1	
	Arm.		25.5	
	Ad.		25.5	
XVIII, 203	T.	18 43 26	19 11 21.2	P. M. — 0″.05 (L. Pi.).
	H.		23.6	
	Pulc.		23.0	
	Arm.		22.6_2	
	Q.		25.1_1	
	Ad.		23.0	
3 Heis Aquilæ	Pulc.	18 46 18	13 49 4.7	
	H.		4.0	
	Ad.		4.4	
[F. 3047	Dorpat and Åbo	18 51 56	59 51 31.7	
	Pulc.		31.7	
	Ad.		31.7	
42 Heis Lyræ	H.	18 54 40	26 2 32.6	
	Pulc.		32.3	
	Ad.		32.4	
D. M. 20°.4022	Boun.	18 56 0	20 39 25.5	
	Ad.		25.5	
46 Heis Lyræ	H.	18 56 13	26 6 56.4	
	Rü.		[52.7_2]	
	Pulc.		55.4	
	Ad.		55.9	

Number.	Authority.	Right ascension.	Declination.	Remarks.
		h. *m.* *s.*	° ′ ″	
Yarn. 8113.	Yarn.	18 58 21	21 5 7.9	
	Ad.		7.9	
Gr. 2761	Åbo and Dorpat	19 0 20	59 56 37.4	The observations, except R. C., are from Struve's Arc du Méridien. Gr. 36″.9.
	R. C. -		37.7	
	Pulc.		37.7	
	Ad.		37.7	
XIX, 6	T.	19 1 18	62 31 9.6_2	Pi. 9″.7; A. Ö. 11″.1.
	Arm.		14.1_1	
	Q.		9.5_1	
	Ad.		10.9	
56 Heis Lyræ, pre.	Pulc.	19 6 32	26 4 20.2_1	
	H.		19.7	
	Ad.		19.9	
56 Heis Lyræ, foll.	Pulc.	19 6 39	26 2 34.3	
	H.		33.2	
	Ad.		33.6	
F. 3115	Åbo and Dorpat	19 7 37	58 15 50.0	From Struve's Arc du Méridien.
	Pulc. -		49.8	
	Ad. -		49.8	
26 Heis Aquilæ	H.	19 9 38	14 52 4.1	
	Pulc.		3.4	
	Ad.		3.8	
F. 3136	F.	19 12 23	59 28 8.6	
	Oom.		10.9	
	Ad.		10.9	
Gr. 2809	Ay. 36	19 13 16	46 45 52.8	P. M. + 0″.26; c. — o.: L. — 1″.0; Gr. + 0″.4.
	Ay. 45		53.1	
	Pulc.		52.8	
	R. C. -		53.1	
	Yarn.		52.6	
	Ad.		52.9	
XIX, 99	T.	19 13 53	66 53 44.7	Should not have been inserted; very doubtful.
	Arm.		40.4	
	Ad. -		42.6	
65 Heis Lyræ	H.	19 14 37	37 12 56.6	
	Pulc.		56.4	
	Yarn.		56.4_2	
	Ad.		56.5	
F. 3148	F.	19 15 56	59 36 21.0	
	Oom.		22.7	
	Ad.		22.7	
Gr. 2835	H. 44	19 18 47	64 9 15.9	
	R. C.		15.7	
	Ad.		15.8	
44 Heis Aquilæ	H. 44 - -	19 20 35	12 46 23.3_2	
	Pulc. 46–50 -		22.6_2	
	Ad. -		22.9	
45 Heis Aquilæ	H.	19 21 49	14 1 53.5	
	Pulc.		52.7	
	Ad.		53.1	
XIX, 139	T.	19 22 27	19 59 40.4	
	Rü.		41.4_2	
	Arm.		41.6	
	Q.		41.2	
	Ad. -		41.1	
48 Heis Aquilæ	Rü.	19 23 37	14 20 25.4_2	
	H.		26.0	
	Pulc.		25.8	
	Schj.		25.5_2	
	Ad.		25.7	

Number.	Authority.	Right ascension.	Declination.	Remarks.
		h. *m.* *s.*	° ′ ″	
D. M. 12°.3940	Bonn.	19 24 43	12 33 34.0$_2$	
	Schj.		32.2$_1$	
	Ad.		33.2	
D. M. 14°.3974	Bonn.	19 30 30	14 7 1.4	
	Ad.		1.4	
61 Heis Aquilæ	Pulc. 41	19 30 58	10 59 45.0	There is a probable P. M. of — 0″.10 (L. L. and B.) not used. Star doubtful.
	H.		44.1	
	Ad.		44.6	
67 Heis Aquilæ	Pulc. 41	19 35 18	13 31 37.4	
	Rü. 42		36.3	
	H. 44		37.4	
	Ad.		37.1	
XIX, 306	T.	19 46 13	11 19 15.2	P. M. — 0″.31 from Piazzi.
	Arm.		15.7	
	Q. 64		14.0$_1$	
	Ad.		15.0	
XIX, 307	P. M.	19 46 18	10 1 58.3	
	T.		57.1	
	Arm.		57.6	
	Q. 62		56.0$_1$	
	Ad.		57.3	
XIX, 312	T.	19 47 5	18 25 11.4	
	Arm.		12.1	
	Ad.		11.8	
XIX, 362	T.	19 54 30	17 16 11.4	
	Rü.		11.5	
	Arm.		11.6	
	Q		9.2	
	Ad.		10.9	
XIX, 394	T.	19 58 36	17 23 0.3	
	Arm.		2.1	
	Ad.		1.2	
XX, 1	T.	20 0 51	64 18 24.0	
	R. C.		24.5	
	Arm.		26.5$_2$	
	Ay. 50		23.6$_2$	
	Ad.		24.6	
XIX, 420	T.	20 2 25	16 18 8.3	
	Arm.		10.2	
	Kön.		[14.7]	
	Q.		8.4	
	Ad.		8.9	
106 Heis Aq'læ	Pulc. 41	20 2 40	10 21 47.5	
	Rü.		47.0	
	H. 44		46.1$_2$	
	Ad.		47.0	
XX, 2	T.	20 3 27	16 32 41.9	Pi. gives 43″.3. The declination is uncertain. Three later observations of Main give 16° 32′ 40″.8.
	Main		46.7$_1$	
	Ad.		43.5	
D. M. 59°.2193	Oom.	20 9 35	59 18 44.2	
	Ad.		44.2	
Gr. 3105	R. C.	20 11 31	38 30 56.7	
	Yarn.		57.0	
	Ad.		56.8	
114 Heis Aq'læ	Pulc.	20 14 41	17 24 5.0	
	Rü.		3.2	
	H.		4.7	
	Ad.		4.1	

Number.	Authority.	Right ascension.			Declination.			Remarks.
		h.	*m.*	*s.*	°	′	″	
XX, 171	T.	20	24	28	19	15	2.1	
	Arm.						3.4	
	Ad.						2.7	
Gr. 3208	Rü.	20	25	36	68	54	46.8_2	A P. M. of + 0″.03 would give 48″.8 for 1875.0.
	R. C.						47.7_3	
	Main						49.6_2	
	Ad.						47.9	
XX, 185	T.	20	26	8	16	34	16.9	
	Q.						15.4_2	
	Ad.						16.3	
D. M. 17°.4355	Rü.	20	28	20	17	45	30.9_2	
	Bonn.						32.4	
	Ad.						31.8	
44 Heis Vulpec.	Main	20	28	36	20	33	30.2	
	Ad.						30.2	
108 Heis Cygni	H.	20	32	41	37	53	41.3	
	Pulc.						41.1	
	Yarn.						42.4	
	Ad.						41.5	
XX, 270	T.	20	35	44	13	21	53.2	
	Arm.						53.0	
	Ad.						53.1	
XX, 319	T.	20	42	25	25	43	8.0	
	Q.						7.8	
	Ad.						7.9	
XX, 358	T.	20	46	10	27	46	58.2	
	Arm.						59.2	
	Pulc.						58.8	
	R. $C._2$						58.0	
	Ad.						58.6	
F. 3606	H. 44	20	47	6	63	34	34.4	
	Bonn.						34.2	
	Ad.						34.3	
30 Heis Delph.	Rü.	20	54	2	16	20	23.0	
	Pulc.						21.3	
	H. 44						21.6	
	Kön.						19.7_1	
	Ad.						21.6	
R. C. 5050	R. C.	20	54	16	43	55	50.1	
	Yarn.						50.6_2	
	Ad.						50.3	
31 Heis Delph.	Pulc.	20	54	45	18	50	43.0	Star doubtful.
	H.						41.6	
	Ad.						42.3	
XX, 453	T.	20	58	10	28	35	52.7	Doubtful.
	Q.						56.9_2	
	Ad.						54.5	
Gr. 3410	R. C.	21	6	48	62	47	8.6	
	H.						10.5	
	Ad.						9.6	
XXI, 71	T.	21	12	49	10	40	39.6	
	Arm.						39.7	
	Kön.						40.6_1	
	Ad.						39.8	
XXI, 77	T.	21	13	22	17	17	59.1_2	
	Rü.					[18	3.6_2]	
	Arm.					17	58.5	
	Ad.						58.8	

Number.	Authority.	Right ascension.	Declination.	Remarks.
		h. *m.* *s.*	° ′ ″	
XXI, 133	T.	21 19 0	63 49 47.9	
	Arm.		48.9	
	Ad.		48.5	
8 Heis Pegasi	Main	21 23 17	21 38 3.8	
	Ad.		3.8	
XXI, 195	T	21 28 51	22 12 3.3	P. M. — 0″.06; agrees with Piazzi.
	Rü.		1.9$_1$	
	Arm.		2.6	
	Q.		2.2	
	Ad.		2.6	
Gr. 3516	Rü.	21 31 51	66 10 11.3	
	R. C.		12.7	
	Ad.		12.0	
Gr. 3517	Rü.	21 32 4	66 12 54.7$_2$	
	R. C.		53.7	
	Ad.		54.1	
Gr. 3549	R. C.	21 37 31	40 28 38.5	
	T.		38.1$_2$	
	Ad.		38.4	
22 Heis Pegasi	Kön.	21 38 30	14 12 12.6$_2$	
	Bonn.		11.1$_2$	
	Ad.		11.8	
R. C. 5390	H. 44	21 41 27	61 53 6.5	
	R. C.		6.3	
	Ad.		6.4	
194 Heis Cygni	Yarn.	21 43 18	38 4 5.8	
	Ad.		5.8	
A. Ö. 22896	Oom.	21 43 52	59 7 13.4	
	Ad.		13.4	
XXI, 312	T.	21 45 42	19 14 27.7	c. — o.: Ll. — 1″.1$_2$; Pi. + 0″.6; P. M. + 0″.03.
	Arm.		28.9	
	Pulc.		28.0	
	H.		28.8	
	Ad.		29.3	
Gr. 3594	R. C.	21 46 35	64 39 3.8	One of these two must be erroneous. The result is very uncertain.
	Q. 67		38 58.2	
	Ad.		38 58.2	
36 Heis Pegasi	Pulc.	21 47 44	19 4 47.2	A P. M. of + 0″.06 would reconcile all the observations except B. Z., and give decl. 1875.0 48″.8. I think it altogether probable.
	Rü.		46.3$_2$	
	H. 44		46.4	
	Main		48.9	
	Ad.		47.2	
Gr. 3608	Rü.	21 48 30	65 9 57.6	
	R. C.		60.0	
	Ad.		58.8	
Gr. 3609	R. C.	21 49 2	62 7 25.8	
	Arm.		25.0	
	Ad.		25.4	
Rü. 9704	Rü.	21 52 53	11 35 51.1	
	Ay. 50–60		50.3	
	Ay. 64		50.1	
	Ad.		50.3	
XXI, 369	T.	21 55 29	26 13 45.9$_2$	P. M. — 0″.04 (L. Pi.).
	Q.		47.4	
	Ad.		47.0	

Number.	Authority.	Right ascension.			Declination.			Remarks.
		h.	*m.*	*s.*	°	′	″	
Gr. 3690	R. C.	22	2	48	52	41	49.4	
	Yarn.						49.6	
	Ad.						49.5	
XXII, 60	T.	22	12	48	19	20	19.3	P. M. — 0″.04, L. Pi.
	Rü.						20.9_2	
	Q.						18.8_1	
	Ad.						19.7	
XXII, 69	T.	22	14	36	13	24	21.4	
	Rü.						19.3	
	Ad.						20.3	
XXII, 158	T.	22	29	48	19	37	54.7	P. M. — 0″.12 from Pi.
	Rü.						52.7	
	Pulc.						53.5	
	Ad.						53.6	
Gr. 3845	R. C.	22	33	14	63	7	11.7	
	Q.						11.4	
	Ad.						11.5	
XXII, 186	T.	22	34	40	13	53	31.3_1	P. M. + 0″.10; c. — o.: L. + $3''.8_1$; Pi. — 1″.4.
	Rü.						33.3	
	Arm.						32.0	
	H.						32.5_1	
	Kön.						33.3_1	
	Q.						33.4_1	
	Ad.						32.6	
XXII, 232	T.	22	44	32	18	28	49.4	
	Arm.						49.0	
	Ad.						49.2	
R. C. 5853	P. M.	22	45	10	65	53	33.7	
	Ay. 40						33.6	
	R. C.						31.9	
	Ay. 45						32.9	
	Ay. 50						33.7	
	Ad.						33.2	
A. Ö. 24834	Oom.	22	48	4	59	26	11.5	
	Ad.						11.5	
43 Heis Lacertæ	Pulc.	22	49	55	35	41	5.3	
	Yarn.						4.1_2	
	Ad.						4.8	
Gr. 3935	R. C.	22	51	50	38	43	16.4	P. M. + 0″.05.
	Yarn.						17.0_2	
	Ad.						16.8	
XXII, 283	T.	22	56	24	15	33	36.3	
	Arm.						35.8	
	Ad.						36.0	
XXII, 285	T.	22	56	38	22	27	[28.4]	P. M. — 0″.05, L. Pi.
	H.						33.2_1	
	Pulc. 48						32.3_2	
	Arm.						32.1	
	Ad.						32.4	
XXII, 297	Pi.	22	59	20	14	17	5.6	
	T.						6.8	
	Ad.						6.8	
118 Heis Pegasi	Pulc.	23	1	19	20	27	37.1	P. M. — 0″.05; c. — o.: Ll. — $0''.7_1$; B. Z. + $1''.1_2$.
	H.						37.6	
	Main						36.3_2	
	Ad.						36.7	

Number.	Authority.	Right ascension.	Declination.	Remarks.
		h. *m.* *s.*	° ′ ″	
Gr. 3993	R. C.	23 2 42	62 57 25.6	
	12-yr.		27.7$_2$	
	6-yr		26.7	
	Ad.		26.7	
R. C. 5973	R. C.	23 3 4	38 14 18.7$_2$	
	Yarn.		20.3	
	Ad.		19.6	
D. M. 64°.1764	Bonn.	23 4 14	64 32 3.5	
	Ad.		3.5	
XXIII. 4	T.	23 4 30	16 55 4.6	
	Rü.		4.1	
	Arm.		4.7	
	Pulc.		3.2	
	Ad.		4.1	
XXIII, 20	T.	23 7 47	18 57 15.3	
	Arm.		15.0	
	Kön.		15.5$_3$	
	Ad.		15.2	
130 Heis Pegasi	Pulc.	23 9 48	24 5 22.6	
	Rü.		21.3	
	H.		23.0$_2$	
	Ad.		22.2	
XXIII, 34	T.	23 11 25	17 37 25.7	
	Rü.		25.7$_2$	
	Arm.		26.1	
	Q.		24.6$_1$	
	Ad.		25.6	
XXIII, 57	T.	23 14 42	16 34 4.4	P. M. + 0″.07, L. Pi.
	Kön.		4.0$_2$	
	Bonn.		3.4$_2$	
	Ad.		3.9	
Gr. 4088	R. C.	23 26 34	65 2 56.7	
	Arm.		57.4$_1$	
	Q. 66		56.6$_1$	
	Ad.		57.0	
F. 4509	Oom.	23 27 47	59 21 39.5	
	Ad.		39.5	
151 Heis Pegasi	Pulc. 48	23 28 45	23 44 8.9$_2$	
	Main 72		8.0$_1$	
	Ad.		8.5	
P. M. 2848	P. M.	23 40 5	59 46 44.5	
	Rü.		44.3	
	Oom.		44.4	
	Ad.		44.4	
P. M. 2850	P. M.	23 40 35	27 43 35.2	See Bonner Beobachtungen VII, 139.
	P. M.		34.6	
	Q.		34.9	
	Bonn.		34.7$_1$	
	Ad.		34.8	
Gr. 4142	R. C.	23 42 3	63 7 23.0	
	Yarn.		23.6	
	Ad.		23.3	
Gr. 4152	R. C.	23 44 53	63 17 24.0	
	Yarn		22.0$_2$	
	Ad.		23.2	
166 Heis Pegasi	Rü.	23 46 38	17 12 21.2	
	H.		19.0	
	Pulc.		20.5	
	Ad.		20.2	

Number.	Authority.	Right ascension.	Declination.	Remarks.
		h. *m.* *s.*	° ′ ″	
XXIII, 216, 217	P. M.	23 46 36	11 13 51.7	Middle point between two stars; Pi. 46″.4. The difference of declination is about 4″.
	T.		51.2	
	Q. 62		49.7$_1$	
	Ad.		50.3	
Gr. 4159	R. C.	23 47 44	38 35 9.2	L. L. gives 6″.5; Gr. 12″.1.
	Yarn.		10.1	
	Ad.		9.6	
XXIII, 235	T.	23 50 19	21 57 10.3	
	Rü.		9.8$_2$	
	H. 44		8.9	
	Pulc. 46		9.6	
	Ad.		9.5	
A. Ö. 26212	A. Ö.	23 51 16	59 19 40.9$_1$	
	Rü.		39.8$_2$	
	Oom.		40.7	
	Ad.		40.6	
XXIII, 238	Rü.	23 51 23	10 46 44.5	P. M. — 0″.05; C. — O.: L. L. + 3″.8; Pi. — 0″.2.
	Yarn.		41.7	
	Schj.		44.1$_1$	
	Ad.		42.8	
R. C. 6258	R. C.	23 54 44	68 52 47.8	
	A. Ö.		48.1	
	Q.		46.2	
	Ad.		47.0	
Gr. 7	R. C.	0 5 12	65 25 50.0	
	Q.		50.5	
	Ad.		50.2	
R. C. 71	R. C.	0 14 27	66 18 41.6	
	Q.		40.0	
	Ad.		40.8	
Gr. 52	R. C.	0 14 34	44 14 36.5	
	Yarn.		37.7$_2$	
	Ad.		37.0	
L. 655	L.	0 23 20	59 17 12.3	
	Oom.		11.0	
	Ad.		11.0	
O, 122	T.	0 29 44	26 33 57 4	P. M. — 0″.08, L. Pi.
	Pulc.		56.7	
	Arm.		57.4	
	Ad.		57.3	
L. 960	L.	0 31 39	59 8 18.3	
	Oom.		18.6	
	Ad.		18.6	
L. 1210	L.	0 39 23	58 53 26.6	
	Oom.		26.9	
	Ad.		26.8	
O, 245	T.	0 51 40	20 43 42.1	
	Arm.		42.4	
	Ad.		42.3	
O, 255	T.	0 54 42	10 30 27.5	
	Kön.		27.7	
	Ad.		27.6	
Pi. O, 312	P. M.	1 4 33	64 20 42.5	
	T.		41.2	
	Arm.		42.5	
	R. C.		42.8	
	Ad.		42.3	

Number.	Authority.	Right ascension.	Declination.	Remarks.
		h. *m.* *s.*	° ′ ″	
I, 30	T.	1 10 5	20 23 38.5	P. M. — 0″.05, Pi.
	Q.		38.3	
	Ad.		38.4	
L. L. 2330	Yarn.	1 11 42	36 43 40.0	
	Ad.		40.0	
I, 90	T.	1 22 30	24 37 39.6	
	Arm.		38.7_2	
	Ay. 72		37.7_1	
	Ad. -		38.9	
I, 145	T. -	1 34 20	25 6 49.8	P. M. — 0″.04; c. — o.: L. + 0″.1; Pi. + 0″.9.
	P. M.		49.4	
	Arm.		48.4_2	
	Q.		47.1_2	
	Ad.		48.6	
I, 191	T.	1 45 24	10 11 30.9	
	Arm.		31.8	
	Ad.		31.4	
L. L. 3536	L.	1 49 36	59 0 57.0	
	Oom.		53.7	
	Ad.		53.7	
L. L, 3533	Bonn.	1 49 42	61 5 11.7	
	Ad.		11.7	
I, 213	T. -	1 50 38	27 11 41.4	P. M. — 0″.07 from Piazzi.
	Arm.		40.1_1	
	Q. 64		41.7_1	
	Ad.		41.1	
L. 3606	Oom.	1 52 1	59 21 8.4	
	Ad. -		8.4	